the American Perfumer and ESSENTIAL OIL REVIEW

MARCH 1954

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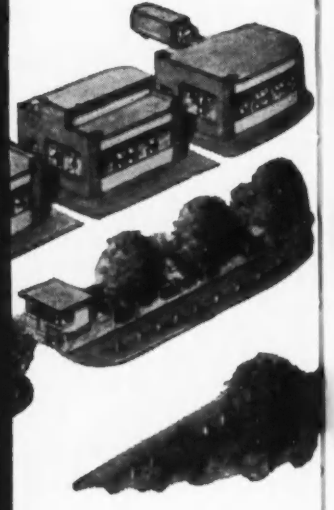

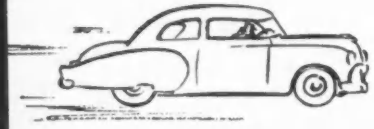

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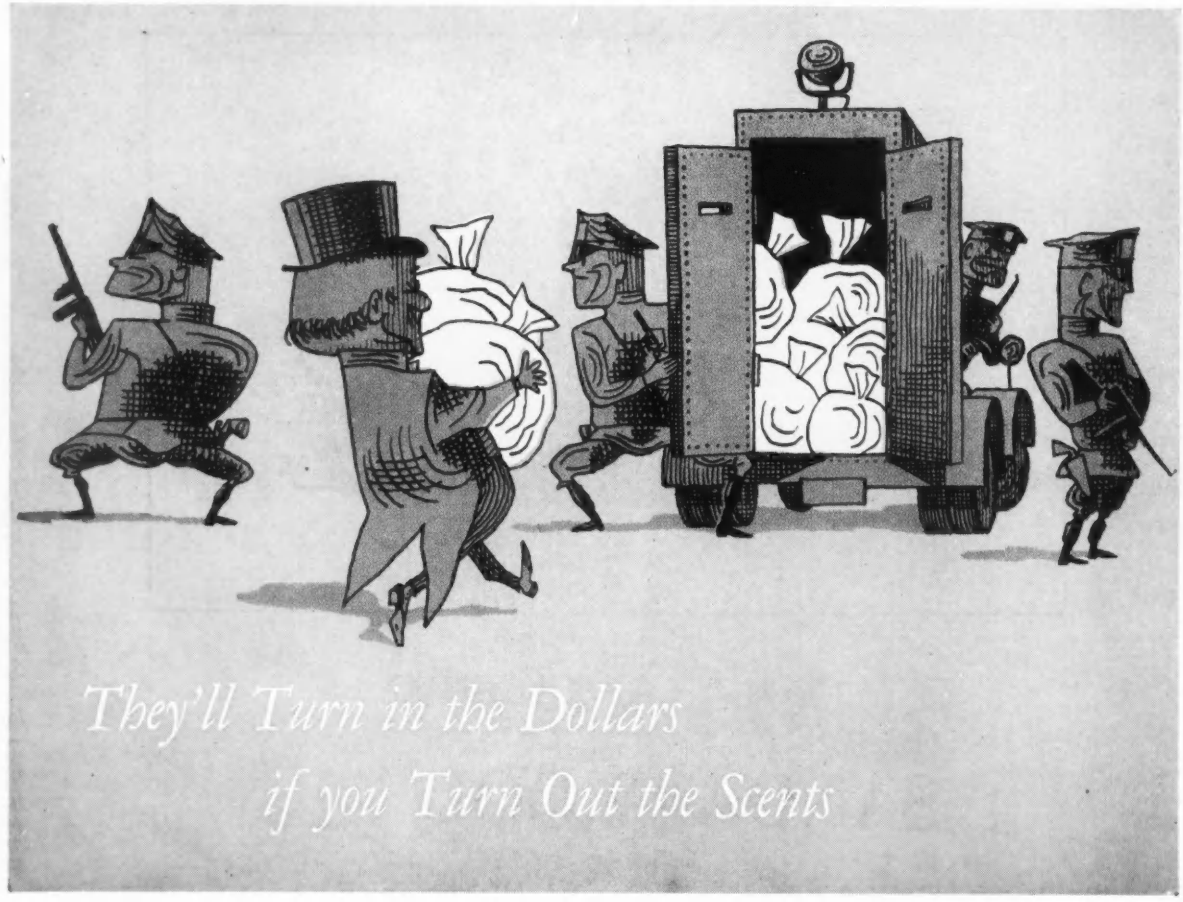

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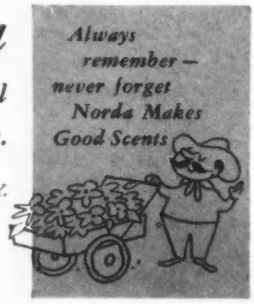

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ABP

the American Perfumer and ESSENTIAL OIL REVIEW

COSMETICS · SOAPS · FLAVORS

Established 1906

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- **CUMIN KETONE** . . See how only ¼ to ½% added to your present floral fragrance heightens and freshens the effect.

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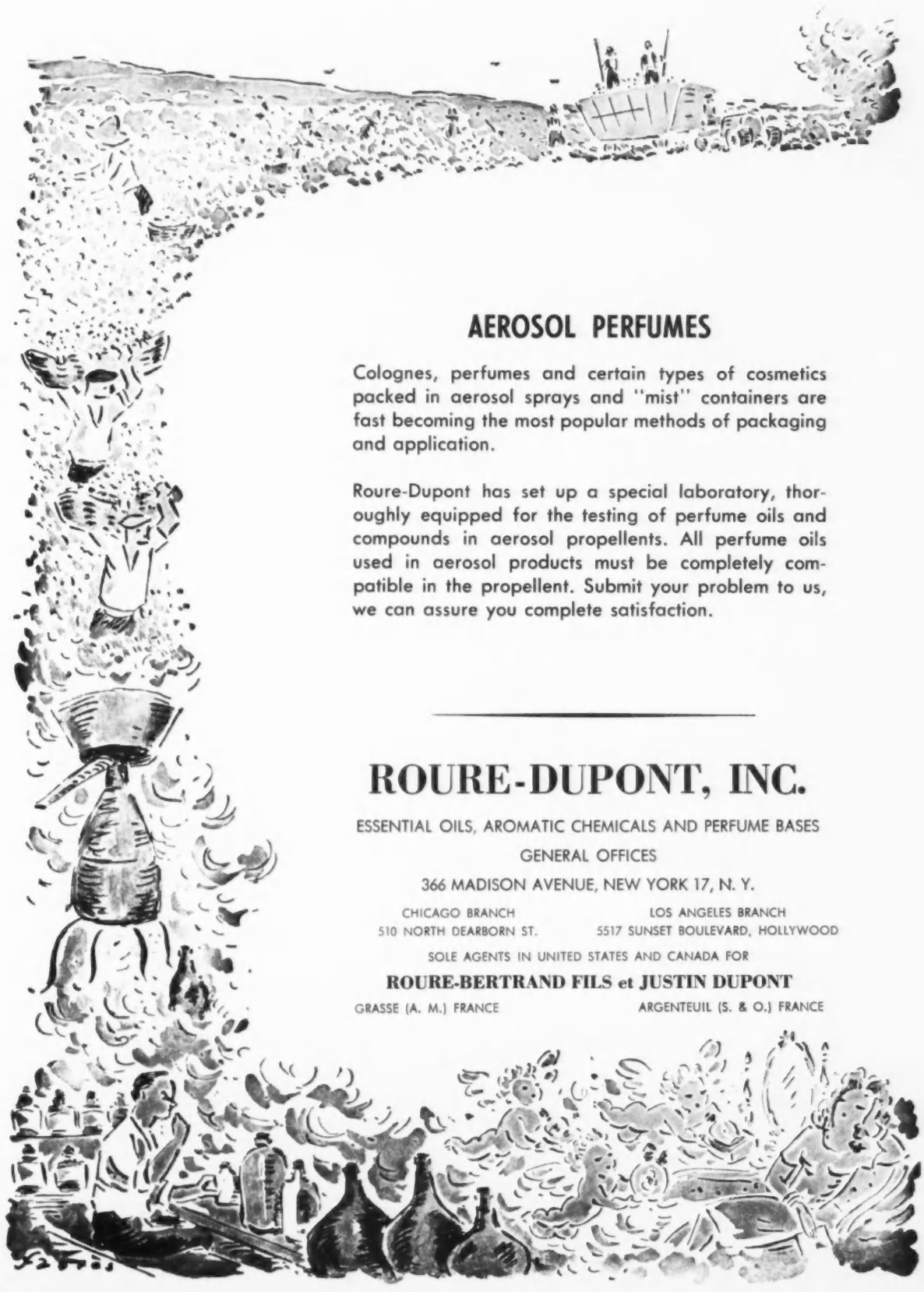

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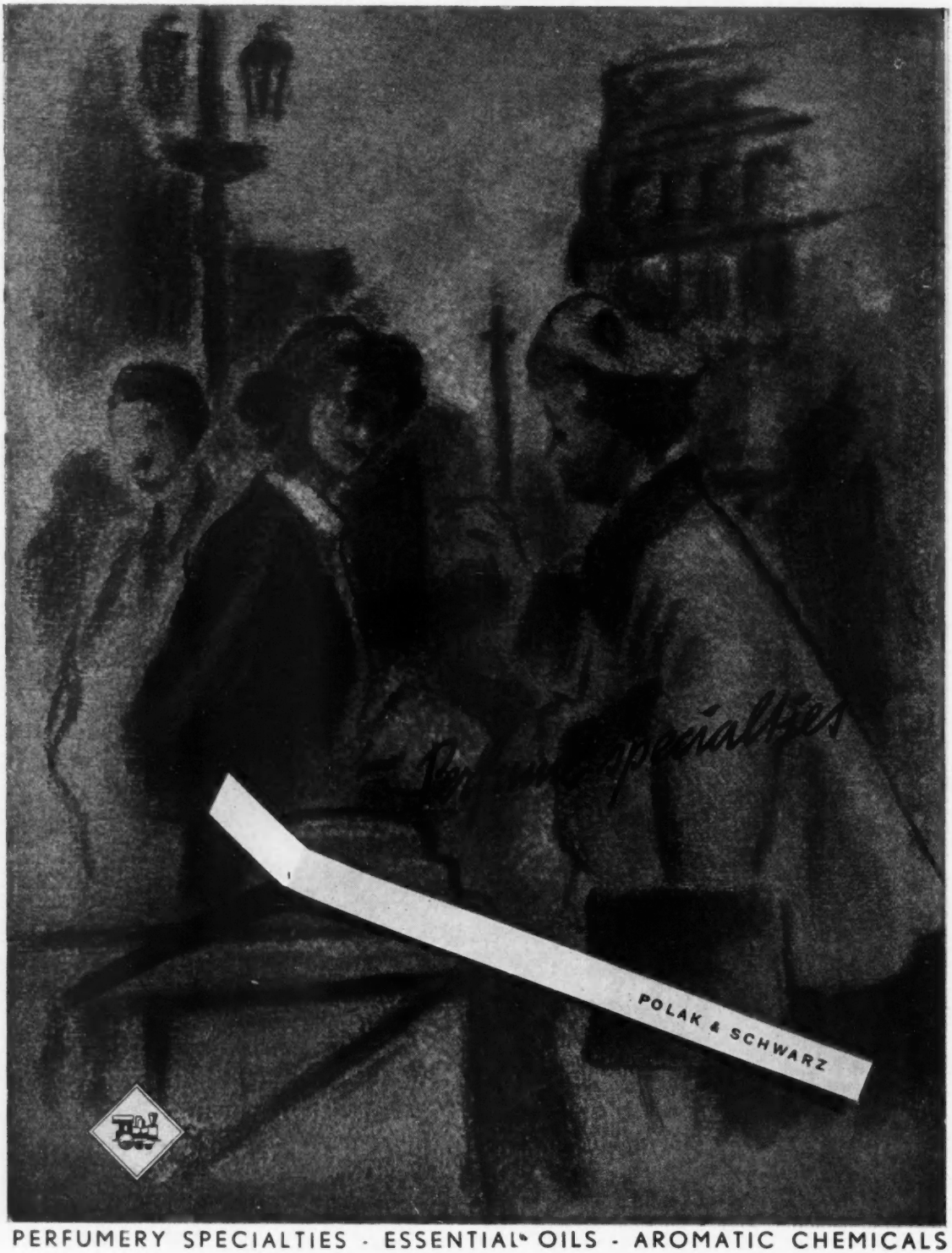

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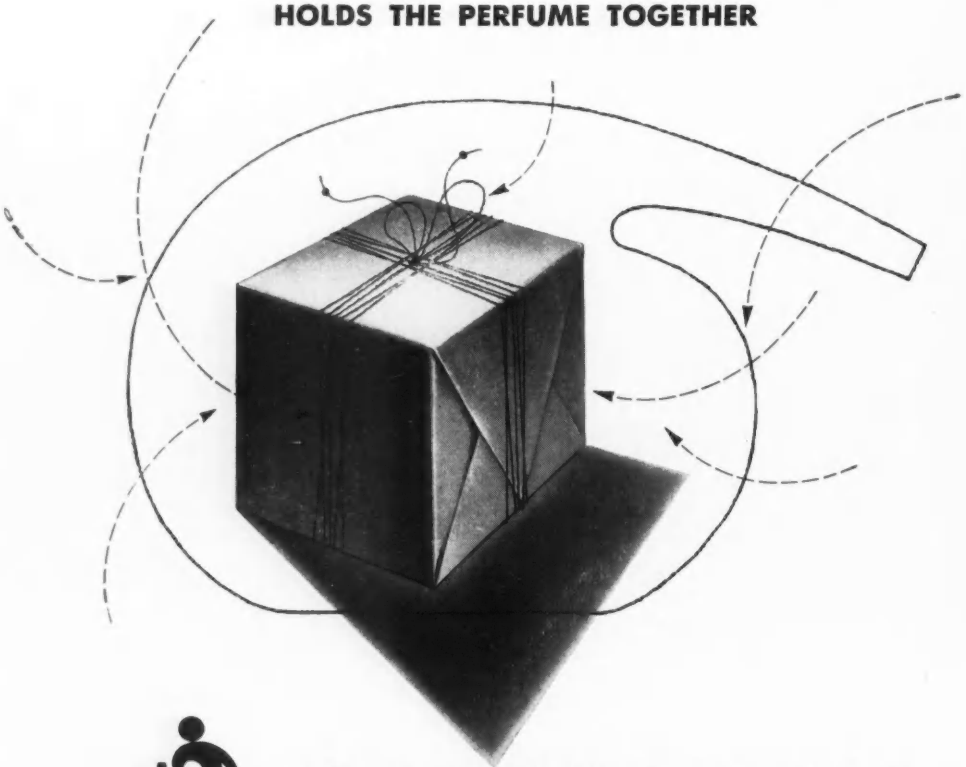

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Desiderata

The Detroit News

BY MAISON G. DENAVARRE, F.A.I.C.

A.M.A. and Vitamin Cosmetics

The January issue of *Today's Health* has another of the lucid articles on cosmetics over the name of Veronica Conley. This department doesn't disagree (on Vitamin cosmetics) too much, but it can't *completely* agree with what is a tacit A.M.A. opinion.

It is true that nothing can stop the skin from aging but to say it goes on "undisturbed" is not a proven fact. Good skin care (using cosmetics) can make any *skin look* younger than it is. Biopsies have shown (to the satisfaction of reliable and qualified dermatologists) that skin, after treatment with an estrogen cream for example, takes on both the macro- and microscopic *appearance* of younger skin —of course the skin isn't younger, in fact, it is just "younger looking."

I agree with our able contemporary that there is some boloney being handed out in publicity on the need for, and value of, vitamins in skin creams.

The example of overdosage cited is of course overstressed as far as danger possible from use of vitamin cosmetics is concerned.

As to the question—"are cosmetics a rational place to use vitamins"—to me it is a matter of degree for there are already small amounts of vitamins in the materials used, particularly if they are natural materials such as beeswax, lanolin and the vegetable fats and oils.

So far as effectiveness by local application versus internal dosing *for the skin effect* is concerned, my pharmaceutical background reminds me that as a result of topical application, a substance manifests its effect *at the site of application first*—if it can affect the skin at all —*then* it is absorbed into the general circulation. To get the same effect by mouth or injection, a much, much larger dose would be required, so much greater it could easily be toxic.

So if anything, the hazard so far as skin effect is concerned, is greater by mouth or injection than by topical application of a cream.

Since the normal skin can make some vitamin D of its own under the right circumstances—and does, to me this indicates that perhaps it is intended for the vitamin to be present on the skin surface.

Whether the vitamins help the skin or not is something that clinical trials can establish easily enough. So it is hoped the industry has done the work, or if not yet, it should get started. Methinks we have loads to learn about our skin.

Veronica Conley has written *very* little with which this department disagrees, but this time, we gotta give our side of the story, too. So, Mrs. Conley, please do continue your good writing. If you stopped, it would be sorely missed, here and abroad.

Notes

A California company now makes chlorophyll from lettuce. . . . A Florida company makes it from Sudan Grass. . . . A new type of chelating agent made from N-hydroxyethylene diamine triacetic acid is being offered as an iron "tier upper." . . . A British company, formerly having produced a half dozen highly refined aromatic chemicals like benzyl acetate, now offers *pure* iso-amyl salicylate, eugenol and hydroxycitronellol. . . . The British-made ultrasonic homogenizer hasn't got me sold yet . . . frequency seems low to me. . . . It looks to me like Milos, writing in the last two issues of the *Alchimist*, house organ for a very progressive and aggressive Belgian perfume house, isn't up to date on his soap stabilizers and antioxidants. . . . The editorial in the January *Good Housekeeping* magazine on hormone creams is a must for all users and makers of cosmetics, *Consumers Union* and *Consumers Research*, etc. . . . Did you know that extracts of mosses, like oakmoss, have antibiotic properties; yea, even apple leaves contain an antibiotic. . . . There is a new valve for low pressure glass aerosol containers (oop! almost said bomb). . . . One company offers a water dispersable zinc stearate. . . .

Dye Remover

Recently encountered is a dye remover for use by workers in colors and dyestuffs. The item has been on the market for years.

The supplier writes as follows:

"This Dye Remover was developed by us some thirty years ago to meet the needs of our employees. Some of our customers learned about it and asked us to sell it to them. So now we sell it as an accommodation to our dye stuff customers.

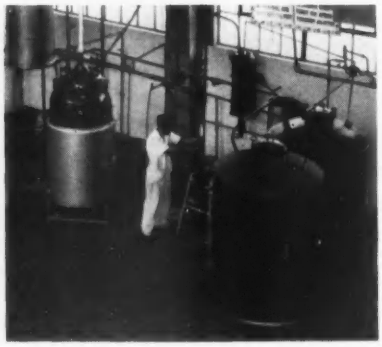
"The package consists of two units. One is brown crystals, which when dissolved in water gives a purplish solution, and when applied to the hands removes most dyes. The white compound is then used to remove the brown stain. The hands are washed with hot water and should be left nice and clean.

"There are one or two dyes which do not respond to this treatment.

PHENOMENAL GROWTH OF ESSENTIAL OILS INDUSTRY IN CYPRUS

DURING the early stages of World War II, Cyprus was dealt a severe blow. Export of whole fruit—one of the island's chief sources of income—was brought to a complete standstill. While many producers were throwing their hands up in despair, the quick-thinking firm of Lanitis Bros. accepted the challenge and decided to treat the fruit on the spot for its essential oils.

A close study of production in the U.S., on a tour of plants from coast to coast, gave Lanitis Bros. the lowdown on the essential oils industry. The finest equipment to be bought in America was shipped over to Cyprus and a new industry got under way.



Extractor equipment—Here is a corner of the modern plant for extraction of flower oils by means of volatile solvents.

From disaster—a new wealth

This industry has since developed phenomenally.

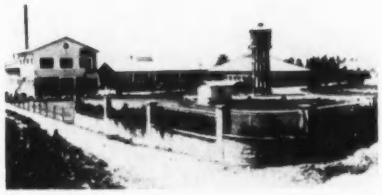
Cyprus is essentially a citrus country. Annual production of lemons and oranges is estimated at 45 million and 140 million fruits respectively.

The essential oils produced are now exported to most countries in the world. Lanitis Bros. possess up-to-date equipment for the deterpenation of these oils. Soluble citrus essences, citrus oil extracts and citrus pastes are also produced by this firm and exported to soft drinks manufacturers, confectioners, candy and ice-cream manufacturers all over the world.

Cyprus in flower

In the warm Mediterranean climate, flowers and shrubs grow in profusion, wild or cultivated. Rose, thyme, sage, myrtle, bay laurel and orange blossom thrive in the perfect weather conditions of this beautiful island.

Lanitis Bros. have vast plantations where they cultivate these plants especially for their essential oils. Today, essential oils of Cyprus compare favourably with any in the world, and Lanitis Bros. have achieved an enviable reputation for supplying the very finest essential oils.



General view of the Limassol plant of Lanitis Bros. Ltd. This plant is equipped with all the latest American-built machinery and processes many million fruits and flowers every year.

For further information and samples of

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ESSENTIAL OILS

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44 Whitehall St., N. Y. 4

Lanitis Bros. Limited,

17 Roosevelt Avenue, Limassol, Cyprus

For such dyes, we recommend a mixture of liquid soap and alcohol. In this case the hands are washed first with soap and water; then a mixture of equal parts of 40% liquid soap and alcohol are rubbed into the hands; the hands are washed again. This, repeated several times, will remove most of the dyes which do not respond to the Dye Remover. Another method we use where a party gets lots of dye on his hands, is to apply a coat of cold cream to the hands and wipe the hands dry. It is surprising how much dye will come off the hands by this simple operation.

"While we make no claims, nor certify, that it is safe and harmless to use, my personal experience and that of our employees for the past years has been that we have suffered no deleterious effects."

There it is. We'll be glad to give you the name of the maker.

Questions & Answers

1059: Hair Pomade

Q. We have done some experimenting with a hair pomade containing lanolin, petrolatum, paraffin and fragrance. We are now using 10% paraffin in our formula, but would like to make a stiffer product. If we add more than 10% paraffin, we get a white effect when rubbing on the hands prior to applying to the hair, therefore, we are interested in using some other ingredient to replace paraffin over the 10%. Please advise us what other ingredients you can suggest to replace some of the paraffin content that would be suitable in a nice pomade for the hair.

G.W.R., Tennessee

A. The moment you begin increasing the consistency of your hair pomade and still have it retain its sticky character, it will give a white effect when rubbed in the hands because you are emulsifying air into the product. If you simply solidify mineral oil with a microcrystalline wax, you would have a comparatively poor hair dressing property. As a result, it is a question of what you want that decides the formula.

1060: Permanent Wave Solution

Q. As a subscriber and reader of your magazine from the other side of the world, we are extremely interested in what you have to offer each month and have obtained many helpful pointers to aid our laboratories and research—the reason being that here we are virtually starved for scientific data on the hair and hair cosmetics. Our main source of information comes from either England or the States. We would like a formula for a blonding emulsion or rather I should say an "idea" to put a blonding emulsion to the hairdresser in a completely new way; the formula for an emulsified odorless non electric solution. We have on record formula for both these products but do not consider them (the second item mainly) good enough to be sponsored by this company. In our country, non electric perming is very popular but the result is a frizz of dry hair with split ends. This of course is mainly due to hairdressers technique in using too hot a clip and/or not enough protecting oil. You could say that it is the old approach. It is therefore why we are seeking a new approach. We are at the moment working on a low temperature non-thioglycollic permanent wave. The solution gives a beautiful curl but the means of heating and prolonging the heat has created another problem. The heating agent we are using in experiments, is an aluminum foil pad, wetted with a solution of Copper Sulphate, Sodium. Chlorate, Aluminum Sulphate, Ammonim Chloride and Water. The temperature we require to operate at is between 100 and 120° F. Sir, these are our problems at the moment and if you would be good enough to assist us with guide formula and data or any idea which you or your magazine may have to offer, we would appreciate it very much.

J.T.R., Indo China

A. We are always delighted to hear from our readers throughout the world and be as much help to them as possible, because in the end it is our readership that makes us. However, the type of information you need requires considerable original research and observation, and we are not the ones to do this work for you. You should contact some consultant and arrange for this development work. As a result we can't help you on the blonding emulsion, but we can tell you that both hydrogen peroxide and sodium hypochlorite have been used. Whether an emulsion can be made with such strong oxidizing agents is something to be worked out. As for an emulsified non-electric solution, do you have reference to the use of heated clamps or envelopes of chemicals which generate the heat? These are described in the book, CHEMISTRY AND MANUFACTURE OF COSMETICS, in a basic way, which we are sure you can apply to your own need. We sense that in the aluminum foil pad, the formula for which is included, that you get a too high temperature and one which does not last. Previous work with chemical heat indicates that one can maintain the temperature for a maximum of about ten minutes and since all of the heat is generated by oxidation, it is a question of using the proper base to be oxidized. This is a big job. We regret that the nature of your problem is such that it requires a lot of research, and as a result we are unable to help you very much.

1061: Deodorant Stick Formula

Q. If at all possible, we shall appreciate it if you would give us a formula for a deodorant stick and an emulsified deodorant stick (alcohol free). Since we rather urgently need this information, we shall appreciate it if you would give this matter your prompt attention.

M.H., Indiana

A. We are enclosing a reprint of an article on solid colognes which will give you the base for making deodorant stick colognes. The deodorant type is made by including from 1/8 to 1/4% of either Actamer (Monsanto) or G-11 (Givaudan). As to the emulsified deodorant stick, alcohol free, we don't believe we know what you have in mind. The book, The Chemistry and Manufacture of Cosmetics, *on page 275 starts a short discussion of stick deodorants, together with a number of formulations. Essentially, these have been made from 10 to 20% zinc oxide with or without a similar amount of zinc stearate, with or without benzoic acid which runs all the way up to 4 or 5%, all mixed in with a stick base. The simplest base is made from 68% petrolatum and 32% paraffin. This base can be altered in numerous ways, which will be evident to anyone skilled in the art.*

The Fifth* Sense

(Olfactive sense)

Since 1768, or nearly 200 years, the House of Chiris
has dedicated itself to the Fifth Sense—the olfactive sense
In the development of Essential Oils, Floral Absolutes, Chemical Isolates
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and produce fragrance, the House of Chiris has a cherished history.
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BRAZIL—SAO PAULO and NEW YORK CITY
Whether Essential Oils, Isolates, or combinations thereof,
are used as fragrance constituents by the perfumery,
soap, cosmetics, or allied industries,
we are happy to be consulted.

*Chemical Senses, page 1, Moncrief—lists senses as follows: "sight, hearing, touch, taste, smell." Note smell is listed Fifth.

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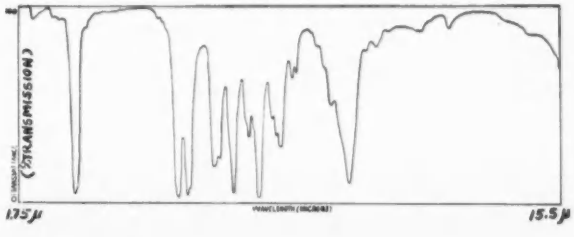
Courtesy of Perkin-Elmer Corp.

Limitations of Infrared Analysis

INFRARED spectroscopy has caught the imagination of the chemical industry. Widely heralded for research, analysis and control it would seem to be the magic bullet of the analytical and control laboratory. Like 606, sulfa drugs, penicillin and the various omycins, each a wonder child in its infancy, the infrared spectrophotometer will come however to play an indispensable but nevertheless limited role in the cast of analytical instruments. Indeed it will not even replace its older brothers, the ultraviolet spectrophotometer and the colorimeter. How amid the hucksters, amateur "experts" and eager technical men can a balanced view be gotten? Perhaps some of the following considerations will help.

Figure 1



A balanced view of a powerful tool in competent hands for aiding the solution of many problems difficult or impossible by other means alone. . . . Data compiled by Aromatics Committee of the Essential Oil Assn. of the U.S.A.

Modern commercially available spectrophotometers automatically record a graph of percent transmission against wave length. An example of such a graph is given in Fig. 1. Notice that a downward peak represents absorption of radiation. In Fig. 1 at 6.0 microns the transmission is 3.0 percent indicating great absorption while at 5.0 microns the absorption is negligible as the sample transmits 99% of the incident radiation. A spectrum can be obtained in about 15 minutes although for special problems the time may be greatly lengthened.

Interpretation of Spectra

The instrument manufacturers have made it possible to get spectra rapidly and conveniently. The interpretation of spectra requires knowledge and experience. If the spectra of pure materials are compared and found dissimilar we can be sure that the materials are different.

If the spectra are alike then it is strongly probable but not certain that the materials are identical. Different compounds may have similar spectra.[1] Additional uncertainty will arise if the original purity has not been definitely established. Whether spectral differences in various spectra are due to impurities or of structural origin may be a difficult question. One authority has stated that although the minimum detectable amount of impurity varies enormously from one case to another 1 mole percent is a typical value.[2] It may occasionally be possible to detect extremely small amounts of one compound and overlook fairly sizeable quantities of another in the same mixture.[3] This follows from the varying intensities of absorption, the degrees of similarity, and the fortuitous band overlapping exhibited by the components of a given mixture. The detection and identification of *minor constituents* of essential oils or perfume compounds will be facilitated by the infrared spectrophotometer only in a few particularly favorable instances.

Where matching spectra cannot be obtained the spectroscopist can in most cases identify some of the gross structural features of an unknown. Aldehydes, alcohols, acids, esters, aromatics, unsaturates and many other functional groups absorb radiation of specific wave lengths. The absence of absorption at these wave lengths positively indicate the absence of a specific functional group. The finer details of the structure of a substance are difficult if not impossible to ascertain from the spectrum alone. Matching the spectra of an unknown with a known material is the best though not perfect identification.

Where Unknown is a Complex Mixture

Where the unknown is a complex mixture as is commonly the case with even simple perfume blends or essential oils the spectroscopist is almost helpless. With the assistance of a fractionating column, chromatography and chemical separations coupled with a substantial library of reference spectra progress can be expected. The preparation of the necessary pure reference compounds is obviously a costly, time consuming process. This synthetic work also is required for quantitative analysis in order to establish constants and minimize interferences. An assay for a constituent of a complex natural product may still be only partly reliable due to the usual variations in natural products or the nature of an adulteration. A determined blender could outwit the unaided infrared spectrophotometer in many instances.

Fundamentally the infrared spectrophotometer is as simple as its above mentioned older brothers. Radiation of a specified wave length selected from the range of wave lengths available on the instrument is passed through a sample and the amount of unabsorbed radiation is measured. The instrumental differences listed in Table I are necessitated by the interaction of matter and radiation. For example, glass and quartz are too opaque to infra red radiation thus necessitating the use of rock salt cell windows and prisms. Significantly the interaction makes spectroscopy valuable. The key to the basic theoretical concept of how matter absorbs radiation is that the molecules, atoms and electrons constituting matter are tuned to the specific wave lengths absorbed. Ordinary radio reception is obtained by turning a knob which varies the dimensions of a component until the set is tuned to the desired station broadcasting on a fixed wavelength. Molecules, atoms and electrons are naturally tuned by virtue of their structure. Absorption in the infrared region is a function of the mass of the atoms, the distances between them, and the strength of the bonds holding them together in the molecule. The infrared spectrum is therefore directly dependent upon the kinds of atoms in a molecule, their spacial configuration, and the type of bonds in the molecule. Obviously each molecular species or compound should then have a unique infra red spectrum. A word of caution is required for very similar compounds can have radically different spectra and radically different substances can have somewhat similar spectra.[4]

TABLE I

Spectrophotometer	Usual Range, Microns	Source	Sample Cells & Prism Material	Signal Receiver
Visible	.4-.75	Tungsten Lamp	Glass	Photoelectric Cell
Infrared	.75-15	Glowing Metal Oxide Bar	Rock Salt	Thermocouple
Ultra Violet	.2-.4	Hydrogen Lamp	Quartz	Photoelectric Cell

Obviously the infrared spectrophotometer will not eliminate the chemist nor the perfumer, taster, or color matcher. It will provide a powerful tool, in competent hands, for aiding the solution of many problems either difficult or impossible by other means alone. Once an assay procedure has been established it is elegant and rapid. The inherent response of the infrared spectrophotometer to almost all organic molecules coupled with the high specificity of spectral character for each compound indicates an enormous potential justifying the ingenuity and time spent in its development and in applications. Nevertheless, the infrared spectrophotometer has real limitations. Moreover it is an expensive laboratory instrument requiring competent professional care and maintenance. It will not solve all analytical problems nor easily solve most. The wisest will look before they leap and with intelligent understanding will be prepared for the very real limitations of the infrared spectrophotometer.

References

[1] Miller, F. A. in Gilman, H., *Organic Chemistry* Vol. III, John Wiley, New York, 1953, p. 135.
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[3] Bernstein, R. B., *Journal of The Soc. of Cosmetic Chemists* III, 4, 1952.
[4] Hallett, L. T., *Anal. Chem.* 25, 17A (1953).

I recall the consternation caused by Henry Ford's announcement that the minimum wage in his factories for everybody would be $5 a day. No man was ever more bitterly denounced in directors' rooms and fancy clubs. He was a socialist; he was destroying the capitalistic system. On the contrary he was saving the system which could never have been saved unless the workers who made the automobiles and other good things, were paid enough so that they could also be the buyers of the things they made.—*Bruce Barton.*

The less a man knows, the easier it is to convince him he knows it all.—*The Item.*

How a business may produce a good paper showing by selling its sustenance . . .

Profits are up! . . . but the competitive status of the company may be down.

E. B. WEISS:*

Energetic Competition Is Here

STOCKHOLDERS of a number of corporations were pleasantly surprised when they examined the semi-annual reports of the companies in which they had invested. In some instances, small gains were shown in net over the first half of 1952; in other instances, the shrinkage in the net percentage was smaller than anticipated.

Fine! Fine! Fine!

That is—until one gets behind the figures and finds that the business has been put on a starvation diet of selling sustenance in order to make a good paper showing.

Accounting Skulduggery

We're pretty intimately acquainted with several specific instances of this sort of financial report legerdemain. And we think it is high time it was exposed for what it is—*accounting skulduggery.*

But here is a manufacturer whose line is reasonably competitive in several, if not all ways—construction, quality, price, etc. His financial position is thoroughly sound—there is no indication of weakness in the inventory position, accounts receivable, etc. To the contrary, for at least seven years up to the end of 1952, this corporation's net profit percentage had been one of the largest in the industry.

Even in the first half of 1953, when the industry became strongly competitive for the first time since the War, this company's net profit percentage would have topped the industry average by a considerable margin.

But management was determined that its net profit showing would stand out in that industry's crop of statements for the first half of 1953. Indeed, management was determined to show a *larger* net than in the first half of 1952—even though it might be a matter of just a few pennies more per share.

So management cut advertising. It also cut funds for promotion. And it even reduced the size of its sales force. It also delayed placing an order for new packages that would have enabled this line to sell more effectively under conditions of self-selection. And it delayed taking any action to move into a new type of retail outlet that promises to become quite important in this merchandise category.

Competition Forges Ahead

Simultaneously, the aggressive organizations in the industry had:

1. Maintained or increased their advertising budgets (and two manufacturers who previously had merely been "token" advertisers approved substantial budgets and committed themselves to national advertising as basic policy). Thus, the number of advertisers in the

*Grey Advertising Agency. Abstract from Grey Matter, Vol. 24, No. 20, Oct. 15, 1953.

industry increased in the first half of 1953 over the same period a year ago; so did the total volume of advertising. This meant that, actually, the manufacturer who cut his budget had curtailed his selling power *competitively by considerably more* than a casual examination of his own ad budget figures would suggest.

2. Put new packaging on the market that fitted beautifully into a self-selection and self-service age.

3. Begun to experiment on a substantial scale with new outlets and, in two instances, competitors had made such quick progress in several of these new outlets that the company we are discussing will find it to be *extremely costly* to dislodge them when finally it decides to enter these new markets—if, indeed, it may not already be *too late* to "knock them off."

4. Enlarged and, in general, strengthened their sales organizations.

5. Two competitors have announced the strongest programs of in-store promotion in their history, with splendid new self-selection fixtures.

6. Three competitors have come out with product improvements that must have required substantial investments in plant machinery, new packaging, etc. The trade's and the customers' acceptance of these new lines have been almost sensational.

But the *stockholders* of the company we are discussing see only the *figures* that are placed before them in the *semi-annual statement*. And the figures look good to them! So they're delighted. And they decide that management has done a "terrific" job—vive la profits! And, of course, that was precisely one of the objectives of management—to win *stockholder* approval.

Bankers Fall For It Too

It wouldn't be quite proper to cluck sympathetically about the poor "economic illiterate"—the stockholder. The banker—from investment banker to commercial banker—is frequently as much of a "fall guy" for this sort of financial window dressing as the "great unwashed" among the army of stockholders.

The financial statement has become *less and less revealing* with respect to the *real* accomplishments of the management of a company. It has become a *murky* window through which to look at a company's achievements.

As a matter of fact, the financial statement really shows little other than the *skeletal* structure of a business. Now we do not deny the importance of the skeleton; when those bones are strong, the remainder of the business organism is obviously aided.

But a skeleton is a skeleton.

And skeletons are hardly vigorously competitive, over the long term, with a business that is well padded, well fed, and well!

The Retail Revolution

This is particularly true in this era of a barely completed retail revolution—with a *second* retail revolution hoving in sight over the horizon.

We have moved into an age of self-service, self-selection, quick retailing. *We may soon be moving into an age of automatic retailing!*

The whole trend of the merchandising times is toward brands into which *self-propelled selling impetus* has been built *by the producer.*

The retail outlet tends to become more and more simply a brilliant display of merchandise. The merchandise moves off the shelves much more on the basis of what the *manufacturer* has done to make it move, than on the basis of what the *retailer* does (other than merchandise display) to make it move.

In general, the *retailer* does *less and less selling* in the traditional retail sense. And more and more of what selling he does—*the manufacturer pays for* in the guise of allowances that are right now multiplying in *variety* and size.

Competitive Status

When a manufacturer, under these marketing circumstances, deprives his line of the pre-selling that he must finance, conceive, produce and deliver—then no matter how "brilliant" his financial showing, *that manufacturer is losing his competitive position.*

And right there is the *real* indication of the job that management is doing—right there in that phrase *"competitive position"*—not, *most emphatically not* in the cold, unrevealing figures of the typical financial statement.

Financial statements give absolutely no indication of whether:

1. the *line* is more strongly competitive than before.

2. the *merchandising* policy is more strongly competitive than before.

3. the *promotional* policy is more strongly competitive than before.

4. the *advertising* program is more strongly competitive than before.

5. the *sales organization* is more strongly competitive than before.

6. the *distribution set-up* is more strongly competitive than before.

7. the whole organization is more strongly competitive than before; more selling minded than ever before from laboratory to factory to office to field force.

Yet it is *these* factors—*plus* the financial sinews—that determine the *real* strength of an organization that is operating under conditions of true competition.

Competition Ahoy

Obviously, we have moved into a period of energetic competition—the type of market that we expected in 1948, in 1949, just before Korea in 1950 *is here right now.* It is finally and unmistakably here. And it promises to be here for *maybe a decade*—only a vast expansion of war, cold or hot, could change this inexorable fact.

How is management to meet what is to some management executives a somewhat strange type of market —*a competitive* market, and a competitive market in which *the manufacturer must shoulder considerably more of the burden of competitive selling than at any previous time in our economic history?*

By devoting its time, energy, creative imagination and even funds to the *self-destroying* strategy of financial-statement window-dressing?

Or by determining that, for the *long term,* the better goal is not that of a temporary continuation of the net profit uptrend, but rather *putting the organization into fighting trim?*

Boric Acid in Anti-Perspirants and Deodorants

JOHN E. CLEMENTS*

THE determination of boric acid in anti-perspirants and deodorants is troublesome because of interferences from zinc salts, aluminum salts, and organic buffers. The methyl borate distillation is unwieldy. A double precipitation of interfering cations, proposed by Taylor (1), seemed promising, but some adverse results were reported (2). Recently, Martin and Hayes (3) described a procedure which separates boric acid from cations by an ion exchange resin. A *p*H meter is used in titrating the boric acid with alkali.

In this investigation the method of Martin and Hayes was successfully modified for boric acid in anti-perspirants and deodorants. Organic matter is destroyed by a preliminary ashing, and the boric acid is titrated in the usual manner with indicators, mannitol, and standard alkali.

John E. Clements

METHOD

REAGENTS

(a) *Methyl red indicator solution.*—2.46(c).
(b) *Phenolphthalein indicator solution.*—4.6(a).
(c) *Sodium Hydroxide,* 0.1 *N.*—39.32.
(d) *Sodium hydroxide.*—10% (freshly prepared).
(e) *Mannitol.*
(f) *Amberlite IR 120 (H), analytical grade.*—This material may be regenerated after using by transferring the accumulated resin from a number of runs to a large glass tube and washing with 10% HCl soln until the issuing liquid gives a negative test for the adsorbed ions. The HCl is then removed from the resin by H_2O washing.

APPARATUS

Preparation of ion exchange column.—A glass tube 23″ long ×¾″ in diam., provided with a stopcock and outlet tube. Tamp a 1″ glass wool plug into the bottom of the tube, fill the tube with H_2O, and add the ion exchange resin slowly until a column 18″ in length is formed. Before using the column, wash with 100 ml of 10% HCl soln, and follow with 50 ml portions of H_2O until the effluent gives a negative test for Cl ions.

DETERMINATION

Place sample contg 50-200 mg boric acid in a 250 ml casserole, add 2 drops of phenolphthalein indicator soln, and make alk. with 10% NaOH soln. Evap. soln to dryness on a steam bath under a gentle jet of air, dry the residue at 140°C. in an oven for 1 hr., and then ash for 1 hr. at 550°C. Cool casserole to room temp., add ca 50 ml of hot H_2O, cautiously acidify with concd HCl and filter the hot soln thru a quantitative filter paper into a 250 ml beaker. Wash the filter paper with a little hot H_2O and reserve filtrate (the filtrate may be slightly cloudy).

Transfer filter paper to the same casserole, make alk. by wetting with ca 10 ml of H_2O and a few drops of 10% NaOH soln. Evap. the soln to dryness on steam bath, dry 1 hr. at 140°C., and ash at 550°C. for 2 hrs. Cool the casserole, add ca 50 ml of hot H_2O, acidify with concd HCl and filter into previously reserved filtrate. Wash the casserole and filter paper thoroly

*Division of Cosmetics, Food & Drug Administration, Dept. of Health, Education and Welfare, Washington, D. C. Reprinted from Journal of the Assn. of Official Agricultural Chemists, Vol. 36, No. 3, August, 1953 p. 791

with hot H_2O. Discard filter paper. The total vol. of soln should be ca 200 ml.

Cool soln, add concd NH_4OH until barely alk. to litmus paper or until a flocculent ppt appears. Reacidify with concd HCl until slightly acid to litmus paper or until ppt just redissolves. Pass this soln thru the ion exchange column into a one l flask at a rate of flow requiring 10-15 min. for passage. Follow the sample soln with several 50 ml portions of H_2O until the effluent is only slightly acid to *p*H test paper. Add 5 drops methyl red indicator to the soln, make alk. with 10% NaOH soln, and then barely acid with concd HCl. Connect the flask to a H_2O-cooled reflux condenser and boil for 5 min. Wash down condenser with a little H_2O and cool soln to room temp. by placing the flask under running tap H_2O. Neutralize soln to methyl red indicator with 0.1 *N* NaOH, add 4-5 g mannitol and ca 0.5 ml phenolphthalein indicator soln. Titrate with 0.1 *N* NaOH to appearance of the phenolphthalein pink color, add more mannitol, and if pink color disappears, continue titration until it reappears. Repeat the addn of mannitol until there is no further change in color.

Run a blank in the following manner: to ca 350 ml of H_2O add an amount of 10% NaOH soln equal to that required to neutralize the sample after passing thru the column. Barely acidify this alk. soln with concd HCl and proceed as described above beginning with, "Connect the flask to a H_2O-cooled reflux condenser. . . ." Subtract the blank titration from the sample titration and calc. the boric acid content of the sample:

1 ml of 0.1 *N* NaOH = 0.00619 g boric acid

EXPERIMENTAL

The following master solution containing a number of ingredients likely to be found in anti-perspirants and deodorants was prepared.

Aluminum sulfate, C.P.	20 g
Zinc chloride, C.P.	20 g
Magnesium chloride	20 g
Urea, C.P.	20 g
Glycerol, U.S.P.	20 g
Zinc phenolsulfonate, N.F.	20 g
Hydrochloric acid, concd	12.5 ml.
Water	500 ml.

The Associate Referee analyzed 5, 10, and 20 ml aliquots of the master solution for boric acid by the described procedure. None was found. Varying amounts of boric acid were then added to 10 ml portions of the master solution. Results of analyses by the proposed procedure are given in Table 1.

Table 1.—Recoveries of boric acid

Weight of Boric Acid Added	Recoveries	
mg	mg	per cent
50.45	50.8	100.7
50.45	50.8	100.7
50.45	50.8	100.7
100.9	100.3	99.4
100.9	100.9	100.0
201.8	199.9	99.0
201.8	199.9	99.0
201.8	198.1	98.2
201.8	198.7	98.5
	Average	99.5

SUMMARY

An analytical method for boric acid, involving an ion exchange resin, has been successfully modified for the determination of boric acid in anti-perspirants and deodorants. It is recommended—(1) That the procedure be submitted for collaborative study; (2) that study of the topic be continued.

References

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People Who Sell

PEOPLE who sell are more than distributors of goods. They are the eyes and ears of the company. They are the ones who come in direct contact with the distributor or the customer. They know what the customer thinks of the product, what he expects of it, and how it stacks up against that of the competitor. They are usually the first to detect the direction of public demand and the manner in which the competitor is reacting to it. The counsel of the sales executive is highly desirable in planning a research program.—*Battelle Memorial Institute.*

Fluoridated drinking water may cut tooth decay at least 50% under the decay rate in non-fluoride areas according to a survey conducted by the California Dept. of Public Health on school children in 7 cities. In those cities it was found that tooth decay averaged 62% less than in non-fluoride areas.

When your outgo exceeds your income, your upkeep is your downfall.—*Lone Star Scanner.*

Cosmetic Excise Tax Collections

COSMETIC excise tax collections for the years of 1951 and 1952 and also the collections for the months of 1953 so far issued are given in the table following:

	1953	1952	1951
January	$13,123,480	$11,547,853	$12,255,363
February	13,859,961	14,338,420	12,867,842
March	7,805,077	7,248,879	8,534,569
April	9,236,101	8,218,865	5,746,348
May	9,286,470	9,174,622	9,293,461
June	8,875,000	8,253,649	8,622,275
July	9,996,000	9,357,443	8,901,311
August	5,964,000	8,849,488	10,252,706
September	370,000	8,523,241	7,698,854
October	8,204,000	8,439,370	9,365,932
November	19,912,000	7,878,976	8,916,488
December	536,000	10,432,117	8,974,245

It will be noted that cosmetic tax collections beginning with September appear to follow an irregular course. This is due to the change in the system for collecting these taxes on a quarterly rather than on a monthly basis, and no conclusions as to sales of cosmetics should be drawn from them.

A continuation of last month's analysis of developments in 1953 . . . Recent patents . . . Synthesis of new materials . . . Analytical procedures . . . Reports on essential oils

Dr. Paul A. Clifford making a colorimetric analysis

PAUL Z. BEDOUKIAN, Ph.D.*
Author of
Perfumery Synthetics and Isolates

Progress in Perfumery Materials II

WITH yellow earth clay as catalyst, benzyl chloride has been reacted with sodium acetate to give 90% yields of benzyl acetate.[99] Styrene oxide is already being used as a starting material for the manufacture of phenyl ethyl alcohol. A recent patent disclosed the conditions under which this process is carried out.[100] The glycol of styrene was converted to phenylacetaldehyde on treatment with dilute sulfuric acid.[101] Phenyl propyl alcohol was manufactured by forming the Grignard reagent of benzyl chloride and treating it with ethylene oxide.[102] Better and more economical methods of the sodium reaction of esters are described in another patent. The formation of viscous reactants was avoided by adding a salt such as ammonium chloride to the reaction mixture.[103]

The oxo process may soon supply us with large quantities of low-priced aldehydes and ketones. Olefins are easily converted to aldehydes containing one more carbon atom by treatment with carbon monoxide and hydrogen. The aldehyde can then be hydrogenated to the corresponding alcohol. A recent patent describes improvements of this process.[104] The oxo process has also been applied to terpene hydrocarbons to obtain odorous alcohols.[104a] Various primary alcohols are prepared from alpha olefins through the oxo process. Thus, 1-dodecene gives 42% tridecanol and 40% 2-methyl-1-dodecanol.[104b]

Processes described in the Japanese patent literature include improved conversion of safrole to isosafrole,[105] borneol to isoborneol,[106] and the manufacture of borneol,[107] and terpinol hydrate from pinene.[108] The conversion of menthone to l-menthol in 80% yields is described in another Japanese patent.[109]

Substituted cyclopentenones have very powerful and lasting odors and are of great value in all types of perfume compositions including those made for soaps and cosmetics. In this connection, it is interesting to note the appearance of a number of patents which indicate that before long many of these products may become generally available at comparatively low prices. Thus, 2,5-hexanediol was cyclized to 3-methyl-cyclopentanone on passing it over catalysts at elevated temperatures.[110] Similarly, 2,7-octanediol gives methyl 2-methylcyclopentyl ketone. At higher temperatures, the reaction product contains 71% methyl 2-methyl-1-cyclopen-1-yl ketone.[111] Of particular importance to our industry is the conversion of 2,5-undecanediol to tetrahydrojasmone and dihydrojasmone depending upon the reaction conditions.[112]

The preparation of terpeneless citrus oils is described by another patent and involves countercurrent extraction of the oil with an aqueous alcoholic solution of specific strength. Thus, a six stage extraction of lemon oils with 85% methanol gives an oil having an aldehyde content of 48.4%. Extraction can also be made with 78% ethanol and 80% isopropanol.[113]

Synthesis of New Materials of Possible Interest

Aside from the esters of a few acetylenic acids, very few acetylenic compounds are used in the perfume industry. In recent years many acetylenic alcohols, alde-

* Chief chemist, Faberge, Inc.

hydes and ketones have been prepared, some of which may prove valuable as perfumery ingredients. A method has been reported for the preparation of 4-pentyn-l-ol.[114] Other papers describe a synthesis of gamma acetylenic ketones,[115] and the preparation of acetylenic ethers.[116-117]

Nature synthesizes a large number of ethylenic compounds, many of which have desirable odor characteristics. Alpha beta unsaturated aldehydes have very powerful and often pleasant odors, but their synthesis is rather difficult. One method of preparation involves reduction of unsaturated acid amides with lithium borohydrate.[118] Lithium aluminum hydride has been used for the reduction of acids to alcohols. On reducing 2-hexenoic acid, the resultant product contained 25-28% of the saturated alcohol hexanol, indicating the reduction of the double bond.[119] The balance of the product was 2-hexen-l-ol. Beta ethylenic alcohols can be prepared from dichlorotetrahydrofurans. Some of these alcohols have been made and their odors listed.[120] An extensive review on the Prins reaction describes the condensation of olefins with aldehydes.[121a]

By attacking the double bond of 10-undecene-1-01 with selenium oxide, two workers obtained a product containing 19% 10-undecene-1,9-diol and 8% 2-undecene-1,11-diol.[121] Olefins are easily converted to glycols as disclosed in a recent patent application.[122]

Along with the study of pyrethrins, much information is being gained on the chemistry and methods of preparation of jasmone. Both cis and trans jasmone have been made and compared with the natural jasmone which is the cis isomer.[123] Iso-citronellol (2,6-dimethyl-5-octen-01-8) has been synthesized and its properties reported.[124] Cis cinnamic acid has been obtained from the trans isomer through the dibromide.[125]

Application of Darzen's reaction to alpha ionone gives, in addition to the normal product, some ionylformaldehyde which had not been previously reported.[126] Isoprene is thought to be the building block of the terpenes. In this connection, mention may be made of the synthesis of ionones, geraniol and nerol, from synthetic isoprene.[127] Isoprene-like compounds are obtained from acetylene, and from these, highly odorous materials can be prepared. For example, condensation of acetylene with acetone readily yields isobutyn-ol which is then converted to 2,7-dimethyl-2,7-octandiol. The latter can serve as the basis of odorous compounds.[128] On condensing hexahydrobenzaldehyde with acetone, a compound is obtained which is claimed to possess a chypre type odor.[129] Laboratory methods of hydroformylation of olefins to esters are described in another publication.[130] The reaction may be controlled to obtain aldehydes and alcohols.[131] Experiments have been conducted to determine the optimum conditions necessary for the Tishchenko reaction whereby aldehydes are converted to esters.[132]

Attempts are being made to convert nopol, one of the more recently available perfumery materials, to other useful products.[133] Conditions for the reduction of esters to alcohols with alkaline borohydrides have been described.[134]

Of particular interest to the perfume and flavor industries is the synthesis of a number of sulfur compounds during the course of investigations on the flavor components of soy. It appears that the flavor develops

PAUL Z. BEDOUKIAN, Ph.D., chief chemist for Faberge, Inc., and author of Perfumery Synthetics and Isolates, has written another of his annual reviews of progress in perfumery materials for The American Perfumer.

as a result of the hydrolysis of proteins and amino acids. Methyl mercaptan was treated with various aldehydes to obtain the half mercaptals and their odors were noted.[134a 135] The Darzen's reaction can be applied to sulfur compounds. Using this reaction, methyl beta-(thienyl) glycidate has been prepared.[136]

Developments in Analytical Procedures

Tremendous strides have been taken in hormones and similar fields through the application of chromatography. It is encouraging to note the gradual application of this very useful tool to the analysis and study of essential oils and aromatic chemicals. Methods are being developed for the identification of numerous constituents of essential oils by means of chromatostrips made up of silicic acid coated glass strips.[137] Paper chromatography has been employed in the separation of 2, 4-dinitrophenylhydrazones of volatile aldehydes and ketones.[138] The separation of 2,4-dinitrophenylhydrazones can also be carried out on a larger scale by the use of a column of silicic acid and benzonite.[139] Various coumarins found in the plant kingdom can be separated by the use of paper chromatography.[140]

Allophanates are useful derivatives of perfumery terpene alcohols. There is a lengthy review article on this subject in the Chemical Reviews.[141] Homogeneity of alcohols is established by converting them to acetoacetates and then forming the paranitrophenylhydrazones. The melting points of a number of alcohols are given for this derivative.[142] A very sensitive reagent for small quantities of aldehydes is 4-hydroxycoumarin, which is useful for the identification of certain aldehydes found in essential oils.[143] The Beckmann rearrangement of the oxime of alpha ionone has been subjected to a study.[144] Another publication lists the color reactions of various essential oils with salicylic aldehyde.[145]

A review has been made of the methods of determining ascaridole content in various essential oils.[146] The cinnamein content of tolu balsam is carried out by ether extraction of the balsam, followed by alkali treatment to remove the free acids.[147] Another publication describes the method used to determine the furfural content of essential oils.[148] An extensive review covers the various methods for determining cineole in essential oils.[149] Camphor can be determined as the semicarbazone using glycerol as the solvent.[150] A salicylaldehyde colorimetric method has been utilized for the determination of cinnamaldehyde in cinnamon oil and cinnamon bark.[151]

Infrared absorption is finding increased usage in the industry. The infrared spectra of a number of terpenes were reported in one publication[152] and the spectra of ionones, irones and their derivatives, in another.[153]

In determining the essential oil contents of plants or drugs by steam distillation, it is suggested that the water be saturated with salt and a measured amount of xylene then added to the water so as to facilitate the removal of water soluble substances.[154] Microanalytical methods have been developed for the determination of oil and free menthol in peppermint leaves.[155] Small amounts of essential oil in alcoholic solutions can be determined by first diluting the sample with water, distilling off the alcohol, and then extracting the essential oil with pentane.[156] The essential oil content of soaps can be determined by dissolving the soap in water and extracting the perfume with petroleum ether. Provisions are made for removing any unsaponfiable materials or superfatting agents.[157] Other publications report on the determination of hydrocyanic acid in essential oils,[158] methyl anthranilate in essential oils[159] and indole.[160]

The surface tensions, viscosities, parachors and cohesion coefficients of a large group of aromatics have been determined.[161]

In carrying out analytical fractional distillations, a refractive index-density chart is very useful and an interesting study has been made on 25 naturally occurring terpenes.[162] The fifth annual review of analytical chemistry includes an excellent paper on essential oils and related products by two well-known writers.[163]

Citrus Oils

In view of the importance of citrus oils to the perfume and flavor industries, it is not surprising to find an increasing number of reports on the analyses, methods of extraction and various uses of these oils. The use of spectrophotometric analyses for the detection of adulteration in citrus oils has attracted considerable attention lately. A large number of samples of genuine Italian lemon, mandarin and bitter orange oils were collected and spectrophotometric analyses made to establish constants for these oils.[164, 165] Considerable work has also been done by the Food and Drug Department in Washington to establish methods of analyses whereby imported citrus oils could be subjected to reliable spectrophotometric analysis. A thorough study and comparison have been made of Italian and American lemon oils.[166] Other critical methods of examining lemon oils include the determination of evaporation residue, aldehyde content, ester content, etc.[167] Analytical figures are given for samples of Sicilian citrus oils obtained from different parts of the island at different periods of the year.[168] The changes in the oil content of Italian sweet orange during the gathering period, and the yield in relation to the ripeness of the fruit, were reported in another publication.[169]

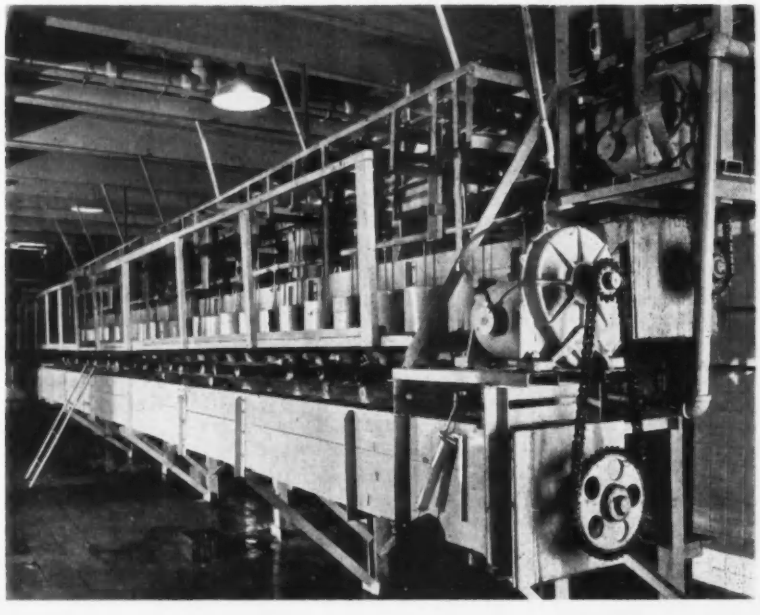
Proper methods of storing orange oils, such as total exclusion of air. and experiments on the influence of various factors in the storage of these oils, were discussed in detail in a recent publication.[170] Of three antioxidants examined for orange oil, alpha-tocopherol was found to be the most effective, followed by propyl gallate and ethyl gallate.[171] Another author reported that the best antioxidant for lemon oil is dihydronorguaretic acid, followed by propyl gallate and ethyl gallate. Alpha tocopherol was found to be of little value.[171a]

In the extraction of the essential oil from the peels of citrus fruits, it is reported that an excellent oil is obtained if the oil cells are first mechanically destroyed and continuous steam distillation used.[172] An extensive article has been published on essential oils from Indian citrus fruits.[173]

Reports on Essential Oils from Indian Sources

India has always been one of the most important producers of essential oils and in recent years, the possibility of exploiting greater varieties of essential oil bearing plants has been investigated.

Two studies have been made on the yield and type of oil obtained from clove buds, as well as on the prop-



Battery of machine presses for extracting citrus fruit peels.

erties of these oils.[174, 175] Eucalyptus oil from the province of Travancore contained 60% d-alpha pinene and 28% cineol.[176] Production methods, physical and chemical characteristics and composition of Indian vetivert oils have been discussed in detail.[177] The oil from Ocimum killimanjaricum contains up to 70% camphor, as reported in two studies.[178, 179] The flowers of Michelia champaca have been extracted with benzene and the concrete oil subjected to a study.[180]

The berries of Juniperus communis grown in East Punjab yielded an essential oil which contained d-alpha pinene as its major constituent.[181] The oil from bellary leaves (litsea zeylanica) contained 35% ocimene along with other terpenes. The tendency of the oil to resinify is attributed to this constituent.[182] A thorough investigation was made of the fragrant oil yielded by Artemisia scoparia and many of its components were identified.[183] The presence of d-alpha phellandrene in the essential oil obtained from the leaves of Aegle marmelos has been definitely established.[184]

The oil from the roots of Homalomena is reported to possess a pleasant odor recalling lily-of-the-valley. This is attributed to the presence in the oil of l-linalool to the extent of 40% along with some terpenyl esters. The economical value of the oil as a perfumery raw material has been stressed.[185] The oil from Ocimum gratissimum possessed a clove-like odor due to the presence of eugenol to the extent of 62%.[186] The essential oils of Seseli indicum[187] and Adenosma capitata[188] consisted largely of terpenes, with limonene as the chief ingredient. The oil from the leaves of Atalantia monophylla was found to have a citrus odor. It was subjected to careful fractional distillation and each fraction examined carefully.[189] An acyclic terpene has been isolated from the oil of Hymenatherum technifolium which possessed three double bonds. This trienic terpene was called hymentherene and constituted 50% of the oil.[190]

The sandalwood obtained from the island of Timor was distilled in Holland. Its oil is claimed to be of excellent quality, possessing a high alcohol content.[191, 192] The wood of Dalbergia sissoo gave a pale yellow oil having a persistent aromatic odor. On examination, it was found to contain two-thirds nerolidol.[193]

(To be continued)

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To pay well is not being generous. It is enlightened selfishness. The well-to-do men and women who want to take in more and more and give out less and less, are the real enemies of capitalism.—*Bruce Barton.*

To speed up the time it takes a rinsed out bottle to dry, invert it over a blotter which is covered with two facial tissues. The combined absorbing action of the facial tissues and the blotter will help dry the bottle more quickly.—*American Druggist.*

Following a ten year survey The U. S. Public Health Service's National Institute of Dental Research concludes that tooth decay appears to start after teeth have softened due to loss of minerals.

When you save enough to eliminate rainy days for yourself, your relatives start sending in bad weather reports.—*The Item.*

Experimental Analysis of the

Psychological Properties of Cosmetics

by

DEAN FOSTER*

A GREAT DEAL is heard currently about panel testing, consumer research, market surveys, motivation analysis, and other approaches to evaluating consumer products. Unfortunately, many of these approaches are purely trial-and-error methods, executed by non-professionals, and failing in their purpose, namely, to answer the questions that the manufacturer needs to know and wants to know. To compete successfully today, the progressive manufacturer is asking specific questions about the quality of his product: How uniform is it? What are its positive and negative properties? and, How can it be improved? These questions can be answered satisfactorily only after a systematic study of the reactions of people to these products. Since human reactions are the principal subject matter, it is only logical to turn to psychologists for the solutions. Actually, however, these specialists in human behavior have rarely applied their science to product evaluation. The principles of psychological measurement, carefully formulated during 100 years of experimentation, have usually been ignored, and each investigator elects to begin again.

There is another side to the issue, however. The industrial psychologists have too long delayed the application of the basic principles, so well known to them, to consumer commodities, including toilet goods and other personal products.

The present criticism of unsophisticated attempts at measurements is by no means directed exclusively at cosmetics. It is easy to list numerous examples of inexpert applications from other classifications of consumer commodities. Within the field of cosmetics, however, Wenzel has pointed out that the so-called test of chlorophyll effectiveness are perfect models of what experimental procedure should not be (1). On very much the same level are some of the attempts at measurement of quality uniformity and quality improvement of foods, textiles, and related materials (2, 3). By contrast, some reports by non-psychologists describing consumer product analyses show a refreshing awareness of the principles of psychophysics and psychometrics. Reading, study, and experience have taught these investigators to avoid the mere common sense approaches employed by others. For the purposes of this paper, we must answer the question: How is the psychologist by training and experience better prepared to assist the cosmetic manufacturer in product evaluation than an individual trained in any other discipline?

The answer rests, at least partially, with his orientation. As a behavior specialist his policy is never to test a product itself, but to study the reactions of individuals to certain stimuli, which, in this case, happens to be industrial products. He focuses, then, not on the hand cream, but on the consumer's reaction to the hand cream.

In addition, the psychologist enjoys other advantages.

*Director of Laboratories, U. S. Testing Co. Reprinted from the Journal of the Society of Cosmetic Chemists Vol. IV, No. 2, Page 83.

He is equipped to apply methods of known value and reliability without the need for a series of trial-and-error developmental procedures; he will arrange his experimental situation in the best interest of his respondents. Let us state the thesis in another way. When we are measuring human reactions, the emphasis must be placed on the respondent and not solely on the product. (The ideal control of the environment for psychometric and psychophysical studies will be illustrated at a later time.) Finally, the psychologist is specially equipped to interpret the responses he obtains and then to adjust his methods in relation to the results obtained.

The Indirect Approach

In many instances, it is of interest to obtain considerable information about consumers' attitudes toward certain products. Advertising and other educational media have often produced a general bias or set of prejudices which may influence response to an object being tested; alternately, they may suggest new ways of approaching the problems of totally new test hypotheses. In such cases, we have employed sentence completion or word association approaches of the type listed below.

Complete the following sentences:

Cake make-up is a skin covering for the .....
Under-arm deodorants are .....
The best use of rouge is .....

What other word comes to your mind *first* when each of the following words is mentioned:

Depilatory	Odor .....
Bath oils	Greasy .....
Vanishing cream	Permanent .....
Mascara	Color Rinse .....
	Indelible .....

In actual test, these words are mixed with others not related by function, such as chair, hammer, etc.

The answers obtained begin to assume a pattern which is surprising to the psychometrist and the cosmetic chemist alike. For example, "odor" alone may prove to be a pleasant association for most, while "depilatory" may be associated with an unpleasant odor. Bath oils may be for the affluent or for the *hoi polloi* by association, while it may be learned that rouge is believed useful only for certain age groups, make-up for different skin conditions, and color rinses for greying hair. There the indirect approach leads to very useful information where the direct is only misleading.

Another type of sentence completion test which is often used is one designed at eliciting responses which reflect consumer attitudes toward a particular product or class of products. For example, in the cosmetic field we have used the following questions which are representative of a wide range of problems:

1. I hate lipsticks that are always .....
2. A shampoo must ..... in order for it to be any good
3. A really good bar of facial soap must cost at least
   5¢.....
   10¢.....
   25¢.....
   75¢.....
   $1.00 .....
4. Deodorants don't work equally well for me because .....
5. In choosing a shaving soap, I am particularly concerned with its .....
6. I don't like depilatories because .....
7. The best soaps have .....in them.
8. Most of the less expensive perfumes are .....
9. I wish under-arm deodorants were .....
10. I know it is better to buy a premium nail polish because .....

A Test Case

To illustrate another difficulty encountered in attempts to get a true expression from consumers, let us look at a very simple example.

Consumers returned a large number of packages of a certain product, believed to be stable, to the stores with complaints about the odor. Some mild deterioration had apparently affected the contents, but the manufacturer was uncertain whether or not he should attempt to withdraw all of his product from the market. Only if the negative consumer reaction was general, did he wish to suffer the expense of recalling all of the merchandise.

The obvious way to determine if a significant consumer segment finds the odor objectionable is to question directly in some such manner as this: "If you purchased this product (hand out a complaint sample) would you find the odor objectionable?" When this approach was tried upon secretaries and other convenient "consumers" about 1 in 6 advanced a mild objection.

Does such a procedure give a true answer, or will there be many more complaints forthcoming? To recheck the findings, why not resort to a common psychological technique? It is known that in many instances a simple, indirect question is more effective in obtaining an individual's "real" reactions than is the direct avenue. Protective methods such as the ink-blot (Rorschach) and the tell-a-story-about-a-picture test are premised on this knowledge (4).

The indirect approach was employed on a second group of consumers who were asked, "Please note the odor of this product. Do you believe your friends or acquaintances who might buy it would object to the odor of it?" When they "projected" themselves into the position of others, about 90 per cent objected. The reasoning of the test consumer is stated somewhat like this: "I myself am rather tolerant, but I am sure Mabel, John, and Harry would object strongly to this odor."

As a consequence of the latter test the vendor quickly recalled all of the merchandise and, later, the pattern of store returns indicated that the indirect questioning more nearly evoked the truth than did the direct approach.

Representative Questions

In other cases, typical of those referred to the Psychometric Laboratories of the United States Testing Company, the problems are not nearly so simple and must be subjected to many different approaches. Such questions as the following require answering:

"Is my product sufficiently uniform from lot to lot, and if not what specific quality is at variance?"

"Which of these three proposed package designs is most attractive, has most attention value, best legibility, and greatest apparent size?"

"Is my product perceived to be as permanent in its protective capacity as its two leading competitive brands?"

"Which of these five colors is most preferred when applied to the skin by the consumer herself?"

"If I must sacrifice color, odor, or lasting quality in the present product change, which is least important?"

For the solution of each of these problems it is necessary first to obtain the test materials in the form in which they are used. We learned many years ago that the number of consumer respondents or panel members can be reduced by use of the actual product under known controlled conditions. Since memory is imperfect, little precise knowledge is gained by asking consumers what they think of Blink Eye Shadow or Farley's Skin Balm. If precise control of respondents' environment is not provided, incidental distraction, misinterpretation of instructions, and other factors can destroy the sensitivity and significance of any study. Incidentally, we find in this same context that it is only wastefully wishful to expect Mr. or Mrs. Consumer to design or redesign your product. They are not sufficiently motivated, nor are they articulate or experienced enough to tell you what consistency a vanishing cream should have or what odor is ideal in a hand soap. Under the right conditions they can provide almost unlimited information about the present product, but rarely can they state what should be done to improve it.

Before proceeding with other illustrations, perhaps we should define some of the terms we have used and will use.

Definitions

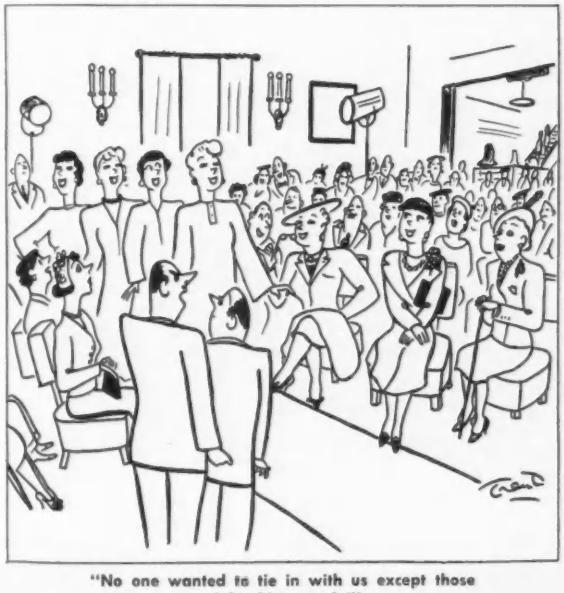
First, what is the difference between *psychometrics* and *psychophysics*, both of which have been referred to earlier? Psychophysics can be illustrated by a test of the perceived length of three lines on a sheet of paper or of the perceived weight of three scraps of paper. In each instance, the psychological judgment can be checked with the aid of a simple physical measure of linear or weight dimensions such as a foot ruler or a balance. When it is not possible to apply a parallel physical scale, then the study becomes clearly psychometric. For example, there is no physical measure of the beauty of a package, a lipstick, or a lady; of the pleasantness of feel of a facial cream; the pain from a razor blade; the readability of a label. Then we must turn to Psychometrics. In certain cases, no physical measure has yet been devised as in the case of odor, while in other examples physical measures are too insensitive to be of help, as with tactual qualities.

Numbers Don't Make Valid Measurement

We must remember too, that mere physical measures of the stimulus materials may be meaningless or misleading. For example, photometric readings of hair reflectance may disagree with perceived luster, or, similarly, rheological assays of a vanishing cream may bear no relation to the "greasiness" or "fluffiness" of the preparation. Some texts list more than a hundred variations of the comparatively small number of basic psychophysical and psychometric methods (5). Most familiar methods include Limits, Equal Appearing Intervals, Constant Stimulus Differences, Production, and Average Error, all of which are basic to psychophysics, while Paired Comparison, Rank Order, Triangle and Single Stimuli Tests are more common to psychometrics.

We mentioned the absolute judgment or rating scale methods. It should be remembered that no judgment is ever strictly absolute but is always comparative in the sense that one's experience invariably influences the so-called absolute judgment. As a consequence, at least the most recent observer experiences should be controlled or taken into account. A rank order indication with more than five items may cause trouble in interpretation for the reason that interest wanes with the long task of arranging in order, and with lack of interest goes the sense of responsibility for best effort.

Before turning to the use of the methods we have just mentioned in evaluating cosmetics, we will examine in broadest terms how they may be applied to "difference" determinations preference study, and quality analysis difference. The difference methods may be divided into two groups, one of which includes a designated standard for reference and the other requires that the observer examine all stimuli from some particular point of view dictated by the instruction. In certain cases, one approach is more sensitive, while in others, the reverse is true. The preference studies, by the same token, can be divided into comparative and absolute. When both can be used, we have observed you prefer" to the absolute rating scale of nine points applied to a single product. In many instances, we find comparative methods impractical and must resort to the absolute. When both can be used, we have observed excellent agreement or correlation.



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Write on your business letterhead for technical literature and suggested formulas.

Finally, the analysis of quality may be approached directly or indirectly, by classification or comparison, by description, or by general behavior study.

Let's begin with a study of shaving cream to illustrate the propositional approach which precedes the test work. When possible, the univariate procedure is most valuable in order that the relative importance of each variable can be assessed as it is individually studied.

An Evaluation of Shaving Creams (a Series of Propositions)

General Propositions

1. Differences Exist: The composite of properties of shaving creams produce measurable differences in their effects on shaving.

2. Quality Uniformity Makes Measurement Valid: The variations in the quality of a shaving cream produced by any given manufacturer is less than the differences between the creams of various manufacturers.

3. The Several Effects Produced Will Be of Measurable Importance: The differences in the whisker conditioning abilities of the several creams will produce a number of effects, each of which can be measured and assigned weights in relation to its importance to shavers.

4. Some Desirable Properties: Other things equal, a *good* cream will promote shorter total shaving time, closer shaves of greater permanence, less discomfort during and after shaving, less trouble for the shaver and more stable quality than a *poor* shaving cream.

From such a schematic series, the experimenter can readily list his parameters, designing in advance his test matrix. Also, he knows in advance how many subjects, observers, shaving and measuring instruments will be required. Since the standardization of procedure and statistical treatment of results is effected before beginning work, the postexperimental regrets are reduced. In addition to the laboratory work, the field testing is outlined in advance.

From Many Angles

We have found it essential to approach each problem from many different angles. For example, it is highly desirable to standardize and control all physical variables with the greatest precision. As a possible experimental procedure, one may elect to have each shaver prepare his face on one side with Cream L and on the other side with Cream J, and report which is superior in regard to the several criteria. Alternately a trained barber would split the faces of the panel of subjects along an imaginary, vertical line, prepare each, and shave them. Possibly a third group would use Cream L on one day and J on another. The psychologist makes certain that the little clues of identification, along with distractions or other influences, are minimized. Then, and only then, can we confidently restrict ourselves to the reactions of small groups of consumers, analyze the results, and extrapolate to the total population.

Select Panels of Trained Observers

While the consumer work is in progress or before it starts, our practice is to subject the products under observation to the controlled scrutiny of panels of trained observers. From these groups come the valuable analytic data which completes the picture.

Often the responses of the trained observers are directly predictive of the results to be found when larger groups of untrained or naive observers are called in. When one lipstick was compared with another on the basis of physical data only, the two products were essentially equivalent in permanence or indelibility, smear resistance, and hue. Trained observers employed in a flavor analysis which was conducted under reduced illumination found that one was sweeter and more floral, while the other was dominantly fruity. The two could be differentiated visually in the stick and differences were apparent in tactual or feeling properties according to the panel. This finding was substantiated by the consumers as preference for one over the other. One appeared to be very light and orange in stick form, but when applied produced the same dark cherry color as the competitive stick. The latter had no such objectionable inconsistency between stick and applied color.

Field Testing

To supplement a laboratory consumer study, a number of samples (accompanied by instructions and questionnaire) may be sent to the homes of another group of respondents. Usually the field tests are much slower than the laboratory tests and must necessarily be more simple in design and execution. Since the conditions of use cannot be controlled, one can never be sure what physical insult the samples will receive, nor can the influences of time lapse, distraction, and discussion be measured. Consequently, larger numbers of respondents must be employed so that assumptions about randomness of influence are more justified.

Most crucial, however, in any psychometric study, be it laboratory or field type, is the *motivation* of the participant. The reward of a free sample is frequently insufficient to inspire a complete and reliable response. In the laboratory the interest of the observer can be better maintained and measured than it can be at home. Many different means of motivation are utilized in our laboratory, including subtle competitive devices. In one test the background information is slightly exaggerated, in another a judgment is forced, in another a choice situation is arranged, and on occasion, actual purchasing of the same priced items is utilized. The danger is that a motivating circumstance may be inexpertly designed so that it operates counter to experimental intention.

Instrumentation

It is frequently necessary to devise special instrumentation for the measurement of psychological properties. The use of a colgesthedonoscope, a proportional odor mixture, and a tachistoscope have proved invaluable in obtaining objective and reproducible reactions. All three are adaptations of standard apparatus commonplace in university laboratories of experimental psychology.

The principle of the colgesthedonoscope can be applied to cosmetic problems when one wishes to change the color of label background or foreground independently. The same principle applies to facial components when one wishes to vary, say, lip color, hair color, or facial tones one at a time.

The tachistoscope is designed to simplify and quantify study of package attention value, label legibility,

have you tried

MODULAN T. M.

The MODIFIED LANOLIN with new properties.

Modulan is chemically treated lanolin containing all the constituents of lanolin modified by a unique treatment to impart NEW and VALUABLE PROPERTIES.

Modulan forms clear solutions even in cold mineral oil and deposits hydrophobic, emollient films on skin and hair. These desirable protective films are waxy rather than tacky and are very pleasant to the touch.

Modulan is extremely hydrophobic – does not form greasy emulsions and is practically odorless. CLINICAL INVESTIGATIONS HAVE INDICATED THAT IT IS HYPO-ALLERGENIC.

Because of its solubility in mineral oil and its outstanding compatibility with oil-in-water emulsions and with soaps and shampoos, Modulan is particularly recommended for use in creams, lotions, baby products, hair preparations, make-up, and ointments.

AMERICAN CHOLESTEROL PRODUCTS
INCORPORATED
MILLTOWN • NEW JERSEY

Write on your business letterhead for technical literature and suggested formulas.

apparent size, and recognition potential of packages and other display materials. Packages are presented singly or in groups at any desired intensity of illumination for time intervals ranging from 1/200 second to several minutes.

The proportional odor mixer is used in analysis and design of odor formulations, testing of odor intensity, odor masking, and deodorization. Several odorant vapors can be mixed in the percentages desired by the simple expedient of valve manipulation. In conjunction with classification, the mixer is especially useful for difficult matching problems.

These instruments are representative of the working tools of the psychologist concerned with evaluation of the qualities and effectiveness of cosmetic products. The instruments only assist him in precise control of the physical and psychological environment of his trained observers and of consumers. Both environments are extremely important and must be controlled for psychological inquiry into the behavior of complex human beings, if any valid conclusions are to be drawn.

Summary

This paper represents an attempt to place in perspective the contributions of the specialist in human behavior to the evaluation of cosmetics. The developments of experimental psychology, extending into the past century, have only recently been applied to industrial products in general, and toilet goods in particular.

The professional relationship of the cosmetic chemist and the psychologist is shown in their combined effort to produce constant and improved consumer products. Of greatest significance is the analytical approach in combination, to provide answers to the "why" questions of the cosmetic chemist. Several specific examples are advanced to illustrate the use of direct and indirect approaches with the aid of the projective and the instrumental for laboratory and field investigations including consumer and trained observers in absolute and comparative analyses of the quantitative and qualitative psychological properties of cosmetics.

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(3) Klein, Samuel, "Olfactory Evaluation of Aromatic Raw Materials," *Proc. Sci. Sect. Toilet Goods Assoc.*, No. 11 (May 1949).
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You're Never Old

SOME years ago, a Chicago physician investigated the lives of four hundred of the world's outstanding men and women since earliest times.

His survey showed that their greatest achievements were accomplished at the average age of fifty. Many of them made their highest contribution after they were seventy or eighty.

Michelangelo was made supervising architect of St. Peter's when he was seventy-two, and at the age of eighty-seven he completed his greatest work.

Titian painted the famous *Battle of Lepanto* when he was eighty-eight.

Bernard Shaw's most penetrating book was written at the age of eighty-eight.

Emanuel Kant wrote his finest work on philosophy when he was seventy-four.

Verdi was eighty when he produced *Falstaff*, and eighty-five when he composed *Ave Maria*.

Goethe was eighty when he finished *Faust*.

Tennyson was the same age when he wrote *Crossing the Bar*.

You're never too old to have new ideas. The lives that shrivel are the lives that never reach out. Your spark of life is in no danger of growing dim so long as you keep an open mind and an eager expectancy.—*Phoenix Flame*.

Selling Costs Surveyed

A RECENT national survey by the Sales Executives Club of New York produced some very interesting data on the cost of selling industrial products through salesmen. From material furnished by 228 concerns, the report gave some pertinent answers to the cost and success of selling to the industrial market.

The estimated cost of each call by a salesman varied from a low of $1.00 to a top of $130.00, with the average cost by the reporting companies at $17.24. Over 40 percent of all respondents were grouped in a $10-19 cost class. The actual amount spent on each call, of course, depends greatly upon the type of product sold by the reporting company. Twenty-three companies were unable to estimate their costs.

On absolutely cold calls, such visits by salesmen resulted in an average of only 9.2 orders per 100 calls. The largest group of companies fell into the 1 to 4 orders per 100 call group. Based on the average cost per call reported above, the average cost per order on such a basis was $187.39. A significant fact was that sixty-six companies reported that their salesmen never went out on unprepared or cold calls.

On calls made as a follow-up to requests for information from advertising, the number of orders per 100 calls was 16. Thirty-five percent of the companies, the largest group, was in the class which obtained between 10 and 19 orders per 100 calls on such leads developed through advertising. On such a basis, the average cost per order was $107.75.

Where prospective customers had previously studied catalogues and other sales literature, the average number of orders resulting from each 100 salesmen's visits was 38.4. The largest group was to be found in the 20 to 29 orders per 100 calls group. The average cost amounted to $44.89.

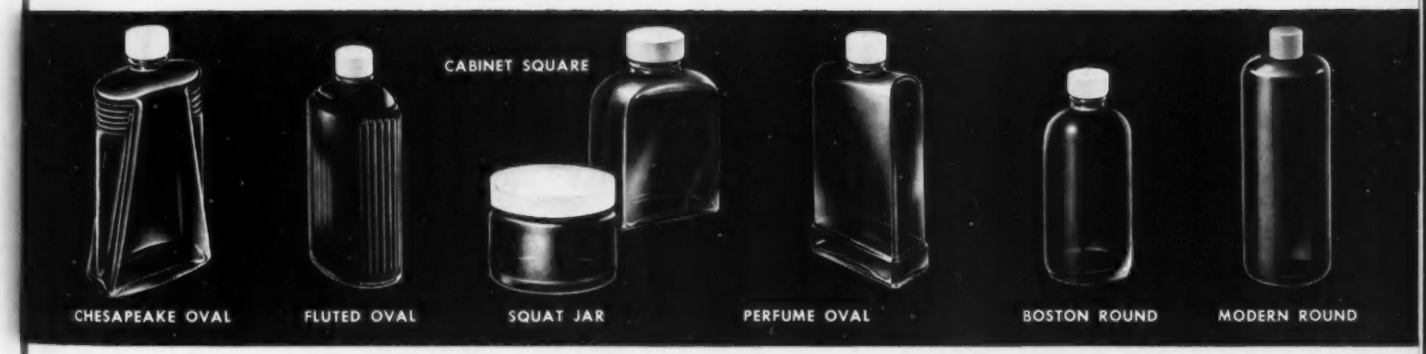
The above short analysis gives some indication of the value of preparing a prospective customer for your sales visit. It points up sharply the expense of sending your representative without prior preparation. To sum up, the average cost of each order was:

Cold call:	$187.39
Through advertising leads:	107.75
After sales literature:	44.89

—*Chemonomics*.

About the best way to solve your problem is to swap it with the other fellow. He always knows how to solve every problem except his.—*Breckenridge Banner*.

Styled for Sales
Stocked for Service



Pack to attract in Maryland Glass

Gleaming, crystal-clear bottles in many eye-catching designs—that's Maryland Glass styling! (Or, if you prefer, we will design a distinctive shape for your use.) And these Maryland Glass bottles are *practical*... sturdily constructed to fill and pack easily, keep breakage to a minimum.

Stocked for service? We have a complete range of sizes in all styles, ready to fill your order immediately. Tell us about your product in the coupon below and we'll send prices and samples. No obligation, of course.

Mail this coupon for details, prices and samples ⟶

MARYLAND GLASS CORPORATION
2147-53 Wicomico Street
Baltimore 30, Maryland

Gentlemen:

We pack..... in .....
(type of product) (size or sizes)

Please send us appropriate samples and prices in clear glass bottles.

Name .....

Company .....

Address .....

City .....Zone .....State .....

How Givaudan's versatile service simplifies your perfuming problems

Suggestions and ideas in the creation or the selection of fragrances, as well as sound technical counsel are continually being provided to customers by Givaudan's experienced staff.

Perfuming an entire product line—a task calling for knowledge of the behavior of various aromatic combinations in various media—is an important Givaudan service.

Knowledge of consumer preferences, gained from long experience, enables Givaudan to help develop perfumes for either a "class" or a "mass" market.

Compatibility tests under varying conditions, such as heat, light, air and humidity make it possible for you to use Givaudan aromatics with complete confidence in their performance.

World-wide resources, with manufacturing plants in Switzerland, France, Italy, England and Brazil, enable Givaudan to supply uniform-quality materials throughout the world.

Givaudan's service laboratories work creatively with customers to develop the best fragrances quality-wise, — and the most appropriate to their lines.

The ability to handle any fragrance problem is one of the reasons why customers find Givaudan's service both economical and efficient.

GIVAUDAN

Better perfume materials through constant research and creative ability

GIVAUDAN - DELAWANNA, INC.
330 West 42nd Street · New York 36, N.Y.

Branches: Philadelphia · Boston · Cincinnati · Detroit
Chicago · Seattle · Los Angeles · Toronto

Deodorants with G-11®

(Brand of Hexachlorophene)

remove the cause of body odor

Soaps, detergents, creams, colognes, sticks and lotions containing G-11 are making dramatic sales increases because they combat the fundamental cause of body odor.

Body odor, particularly underarm odor, is caused by the action of skin bacteria on perspiration. Research has shown fresh perspiration to be odorless until it is contaminated with skin bacteria. G-11 combats these bacteria and thus removes the basic cause of the odor.

G-11 remains on the skin, even from soaps which are thoroughly rinsed off with water. Thus the deodorant action persists for days. Persons who have used deodorants with G-11 for three and four years show no immunity to their action.

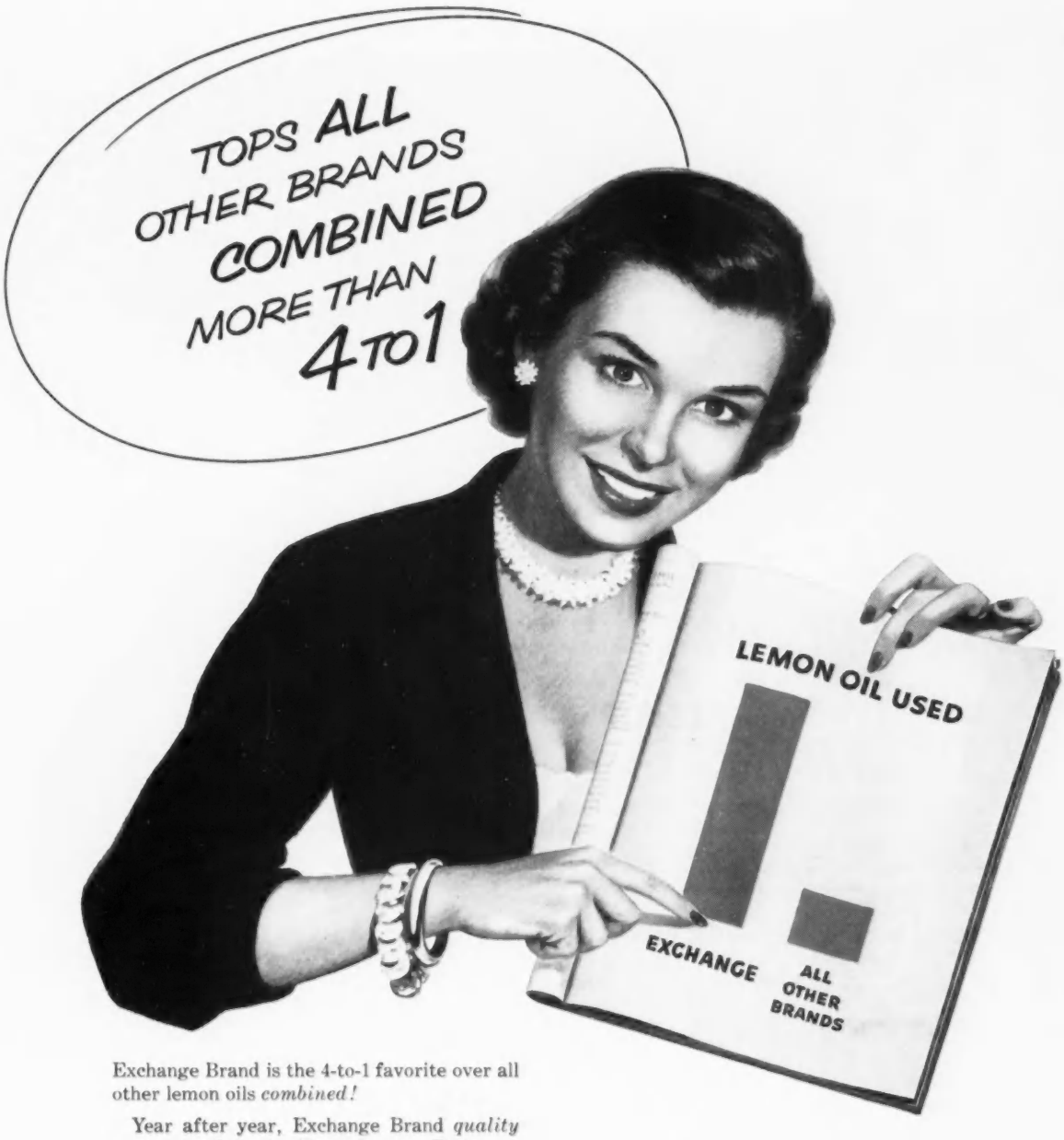
Over seventy scientific articles, mostly by independent researchers, have been published over the last ten years attesting to the antibacterial and deodorant performance of G-11.

In addition, G-11 is not perceptible while on the skin, has no harmful effect on clothing, is compatible with perfumes, is readily soluble in soaps and cosmetic formulations, and is non-staining and non-irritating.

Write now for technical bulletins and formulas for G-11.

SINDAR® Corporation
Industrial Aromatics and Chemicals
330 West 42nd Street, New York 36, N. Y.

Branches: Philadelphia • Boston
Cincinnati • Detroit • Chicago
Seattle • Los Angeles • Toronto



Exchange Brand is the 4-to-1 favorite over all other lemon oils *combined!*

Year after year, Exchange Brand *quality* proves itself in sales. That's because Exchange Lemon Oil comes only from California lemons grown and skillfully processed by Sunkist Growers.

When a little lemon oil goes so far, wh risk buying anything but the best?

Sunkist Growers

PRODUCTS DEPARTMENT • ONTARIO, CALIFORNIA

Produced by

Exchange Lemon Products Co. • Corona, California

DODGE & OLCOTT, INC.

180 Varick St., New York 14, N. Y.

FRITZSCHE BROTHERS, INC.

76 Ninth Ave., New York 11, N. Y.

Exchange

OIL OF LEMON U.S.P.

Disperse your problems with these

Emulsifiers

TEGACID* . . .

A unique stabilizer of acids and acid-reacting substances in deodorant creams and lotions, hair preparations, medicinal creams and jellies.

* ACID-STABILIZED GLYCERYL MONOSTEARATE

TEGIN* . . .

The simplest and most versatile base for creating soft, neutral, greaseless products such as hand, foot and foundation creams. It has no equal for imparting a high degree of emolliency for skin compatibility.

* SELF-EMULSIFYING GLYCERYL MONOSTEARATE

TEGIN P* . . .

A preferred self-emulsifier for creating less viscous, extra soft textures in hand and suntan lotions, shaving, cleansing and cold creams. As little as ½ of 1% added to almost any cream will improve its texture and stability.

* SELF-EMULSIFYING PROPYLENE GLYCOL MONOSTEARATE

TEGIN 515* . . .

A non self-emulsifier for those who prefer to add their own auxiliary emulsifiers. Used as a replacement for stearic acid in lipsticks and makes a fine solvent for bromo acid.

* NON SELF-EMULSIFYING GLYCERYL MONOSTEARATE

Write for complete technical data, formulae and information:

GOLDSCHMIDT

CHEMICAL CORPORATION

153 WAVERLY PLACE, NEW YORK 14, N.Y.

SERVING INDUSTRY FOR A QUARTER CENTURY

SALES REPRESENTATIVES

BOSTON • CHICAGO • LOS ANGELES • ST. LOUIS • MONTREAL • TORONTO

your *First* move

is a **SYNTOMATIC SAMPLER**

EMALDENE

... a lasting fragrance of real appeal . . . . . at **$16** per lb.
1.25 per oz.

EVERDENE

... a perfume oil blend which is ever popular . . . at **$12** per lb.
1.00 per oz.

MAXINE

... a bouquet with maximum floral character . . . . . at **$22** per lb.
1.50 per oz.

... check, test and prove to yourself any or all of the three SYNTOMATIC SAMPLER suggestions herein listed. Prove them for quality, effectiveness and for economical application ...

●

P.S. for that matter ... should you want a blend for a particular purpose ... you need but ask ...

SYNTOMATIC CORPORATION

114 EAST 32nd ST., NEW YORK 16, N. Y.
· MUrray Hill 3-7618

Why is

VANITROPE

the industry's

Fastest Growing

NEW Flavoring Agent?

Because Vanitrope can cut flavor costs up to 50% and improve quality at the same time.

Q. Is Vanitrope now being profitably used by both large and small companies?

A. Yes. Already over 70 companies, ranging in size from America's largest producers of packaged foods down to small plants producing and selling locally, are using Vanitrope to reduce costs and step up flavor.

Q. Is Vanitrope useful in solving the Coumarin problem?

A. Yes. 7 parts Ethyl Vanillin plus 3 parts Vanitrope effectively replaces 32 parts Coumarin. This formula offers the same flavor impact and high temperature baking qualities characteristic of Coumarin.

Q. Is Vanitrope easy to use?

A. Yes. Because it is a pure white crystalline powder, Vanitrope can easily be incorporated in flavor formulae. Since Vanitrope's flavor strength is 16 to 20 times greater than vanillin, we suggest experimenting carefully with it in the first instance. Shulton Technical Service is always available to assist in incorporating it into your formula.

Q. Is Vanitrope available—and stable as to quality and price?

A. Yes. Vanitrope is synthesized in Shulton's modern new plant from always available raw materials. Use of the newest and finest laboratory equipment, including Infra-red Spectro-Photometric inspection, guarantees volume production of unvarying quality.

Samples and brochures available on request.

A DEVELOPMENT OF

SHULTON, Inc.

FINE CHEMICALS DIVISION • 630 FIFTH AVENUE
NEW YORK 20, N. Y.

NEW PACKAGING and PROMOTIONS

New Dorothy Gray fragrance package

DOROTHY GRAY introduces Figurine, a new fragrance series. Distinctively shaped bottles and gold packages sport black silhouetted ballet figures. The line comprises of cologne at $1 per 3 ozs., cream sachet, at $1 per ½ oz., hand lotion at $1, dusting powder at $1.25, sachet talc at 75 cents, and cream deodorant at $1.

CHILD-DENT PRODUCTS is test-marketing a new children's toothpaste containing fluoride, called Childent, obtainable only by prescription. It is designed for daily use by children after they have had their teeth cleaned and polished by a dentist. It sells for 69 cents; national distribution is now being planned.

PARFUMS CORDAY has assumed the distributorship of Morny Limited of London soaps. A box with three cellophane-wrapped 7 oz. Bath Disks sells for $3. A box with three 3½ oz. hand size Disks sells for $2.50. A box of six guest tablets sells for $1.50. Ten fragrances and colors are offered. In addition, June Roses Bath Disks and Hand Disks, three to a box, are priced at $5 and $2.75 respectively.

NORTHAM WARREN CORP. offers Cutex Cream Polish Remover, said to condition cuticle as it removes the polish, and to dissolve one, two or three coats evenly and thoroughly in seconds. A light-weight tube container is being introduced at 39 cents; regular retail value is announced at 50 cents.

TUSSY COSMETIQUES will introduce Creamy Cleanser in April. In a leak-proof, spill-proof 6 oz. polyethylene round bottle topped with pink cap, it retails for $1.25.

PRINCE MATCHABELLI offers a two-dram crown bottle of its perfume, in any of five scents, in a book package entitled "The Magic of Perfume." It has a number of pages devoted to perfume, holding the

Book holding perfume bottle

bottle in the box-like back of the book. Prices range from $1.50 to $2.50, depending on scent.

ROBERT H. CLARK CO. announces Cuddle Bear, a concentrated bub-

Bubble bath containers

ble bath powder package selling for $1. The pliable soft-blue polyethylene container in the form of a bear holds 8 ozs. and floats when empty.

LIP-MATE CORP. announces Lipmate, a compact 3½-inch unit which allows lipstick to flow through a sable brush by simply twisting one end. It comes in six different shades and sells for $2.50. Refills, which replace the empty bottom part of the gold-colored case, sell for 75 cents.

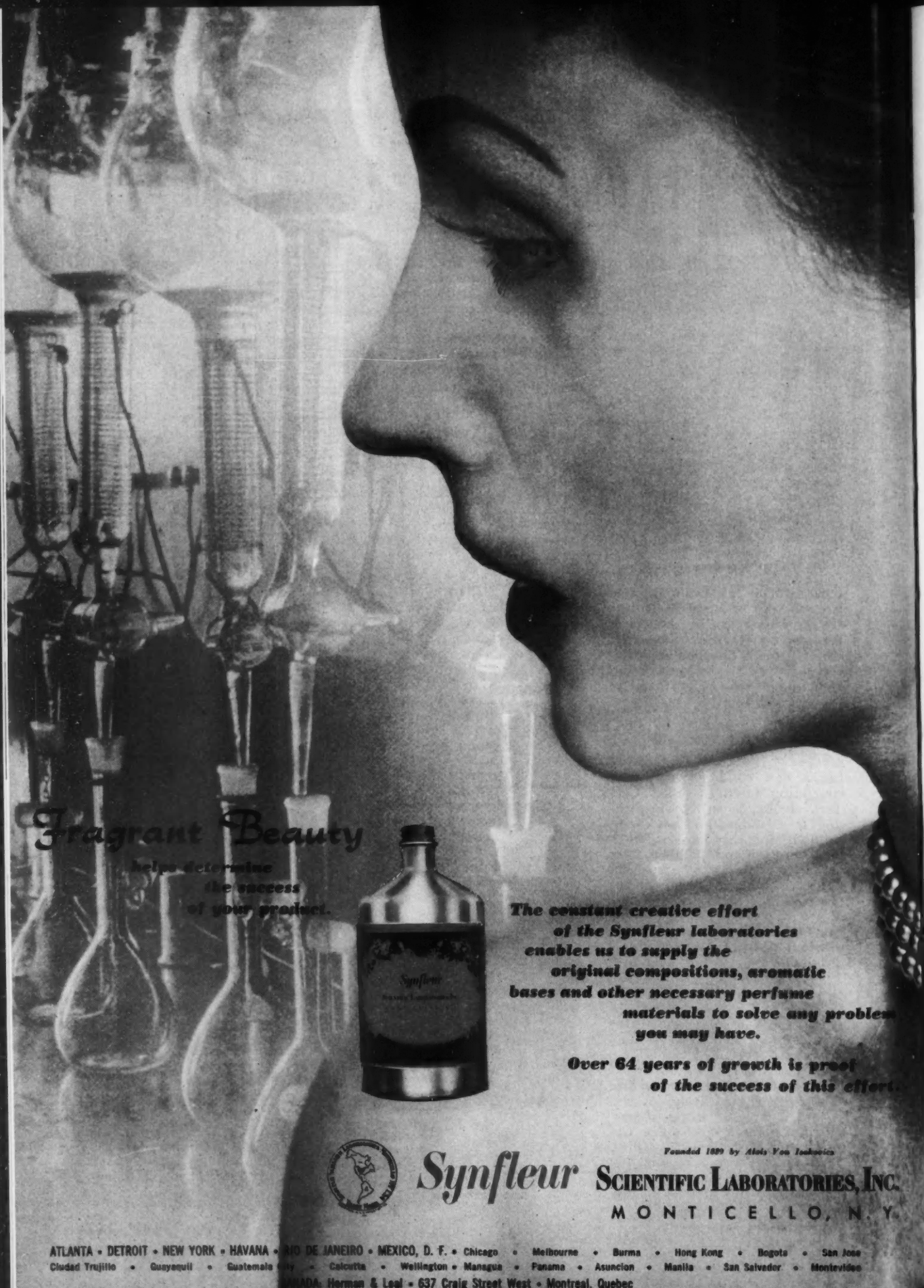
BOURJOIS offers an Evening in Paris deodorant assortment. Twenty deodorant sticks and six spray deodorants are packed together in a counter merchandise display, which includes a free dealer's bonus of two deodorant sticks. The stick and the spray deodorant sell for 75 cents each.

ASSOCIATED BRANDS, INC.'s Kidmetics Division offers Kidmetics Princess Bubble Bath House, containing 20 packages of "Double Bubble" Bubble Bath. The Playhouse has doors that open and many other

House dispenses bubble bath packages

moving parts, and the back of the house has garage doors that open to dispense the Bubble Bath packages. It retails at $1.

CONSOLIDATED COSMETICS INC. is preparing a late spring and summer push for its Lanolin Plus line, comprising Lanolin Plus Hard Water Shampoo, Lanolin Plus for the Hair, for conditioning, and Lanolin Plus Liquid, a skin product claimed to clean, nourish, and to restore oils.



The constant creative effort of the Synfleur laboratories enables us to supply the original compositions, aromatic bases and other necessary perfume materials to solve any problem you may have.

Over 64 years of growth is proof of the success of this effort.

Founded 1889 by Alois Von Isakovics

Synfleur SCIENTIFIC LABORATORIES, INC.

MONTICELLO, N. Y.

ATLANTA • DETROIT • NEW YORK • HAVANA • RIO DE JANEIRO • MEXICO, D. F. • Chicago • Melbourne • Burma • Hong Kong • Bogota • San Jose
Ciudad Trujillo • Guayaquil • Guatemala City • Calcutta • Wellington • Managua • Panama • Asuncion • Manila • San Salvador • Montevideo
CANADA: Herman & Leal • 637 Craig Street West • Montreal, Quebec

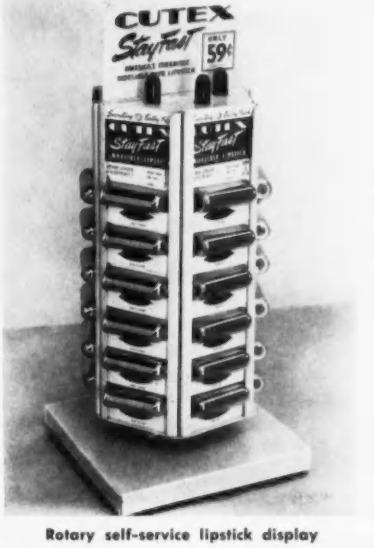
POND's cold cream is currently being backed by what the makers describe as the biggest advertising campaign in the history of the cold cream business. A big space newspaper campaign launched the drive late in February, and will continue for seven weeks; this push will be supplanted by television and magazine advertising beginning April 25. Slogan of the drive is: "In just three hours your skin dies a little", referring to cream as a protector after each washing of the face while the skin re-establishes its natural defenses or "rebalances".

BOURJOIS, INC. is featuring Evening in Paris Satin Finish, a blue plastic combination make-up base and powder compact, with mirror and puff. It sells for $1. A new counter merchandizer and shade selector holds 20 compacts, in five different shades.

PRINCE MATCHABELLI introduces Wind Song Cologne Parfumee in crown-shaped bottles at $2 for the 2 oz. size, and at $4 for the 4 oz. bottle.

ELIZABETH ARDEN is publicizing its skin-tightening treatment, called Firmo-Life, using Lotion and Special Salon Treatment Oil; both come in bottles.

NESTLE-LEMUR offers a free $1 flacon of Djer Kiss Perfume with every 59 cent can of D-K Talc. Another special is a 59 cent can of Mavis Talcum for 39 cents.



Rotary self-service lipstick display

NORTHAM WARREN CORP. offers a self-service rotary lipstick display unit featuring 29 and 59 cent Stay Fast Cutex lipsticks. Containing a dozen each of six shades, it is offered free of charge to dealers.

PROCTER & GAMBLE CO. is reported to be preparing an estimated $14,000,000 to $19,000,000 advertising campaign for its new antienzyme dentifrice, Gleem. Features of the huge drive are mail samplings, local newspaper, radio and television advertising, retail display allowances, and special crews to set up mass displays.

LEVER BROS.' Pepsodent division is introducing Shield, a new toothpaste containing the antibiote tyrothricin, the first such product to be sold without prescription. It comes in 45 and 75 cent sizes.

J. B. WILLIAMS CO. is preparing a new aerosol-type suntan lotion.

POND's Cold Cream is promoted via a new easel window and counter display.

DE HERIOT, INC.'s Petit Panier is a miniature flower basket containing

Flower basket holds perfume bottle

a purse-size bottle of perfume nestling in forget-me-nots. It comes in five different perfumes.

HOUBIGANT offers, for Easter and Mother's Day selling, Eau de Toilette and Foam Bath Essence for $2.75, the price of the Eau de Toilette alone. A new two oz. bottle of Foam Bath Essence will be available at the same time for $1.65 to supplement the 4 oz. size introduced last year.

BOURJOIS presents a new Evening in Paris combination package for Spring selling. Called Double Take, it features the regular one oz. bottle of Toilet Water and the 3¼ oz. bottle of Talcum Powder, a regular $2 value, for $1. Retailers are offered an 18-piece counter merchandizer.

BRISTOL-MYERS is about to test market Discreet, a new deodorant.

New basket-weave bottle

LANCOME is importing its French lavender water, called Lavande. It comes in a basket bottle and sells at $7.50 for 4 ozs., $12.50 for 8 ozs., and $20 for 16 ozs.

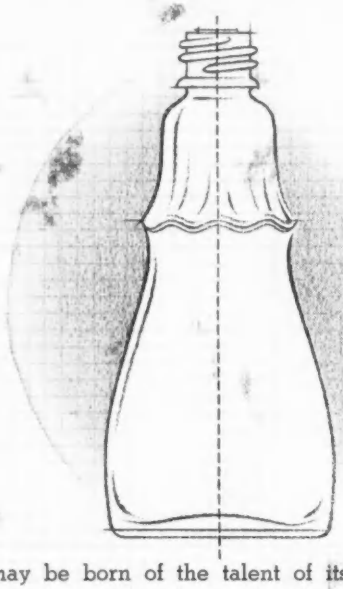
RICHARD HUDNUT has recently introduced two new colognes in its R.S.V.P. fragrance. R.S.V.P. Lotion Cologne, a cream cologne, sells for $1.50; R.S.V.P. Cascade sells for $1.65.

COLGATE has reduced the prices of its Chlorophyll Toothpaste from 89 cents to 63 cents for its economy size, from 69 cents to 47 cents for its giant size, and from 43 cents to 27 cents for its large size. The price reduction will be advertised via newspapers, radio, and network television programs.

HOUSE OF JEAN PATOU will introduce a half-ounce size of three of its perfumes in April, in time for Easter and Mother's Day promotions. It comes in a honeycomb-etched crystal boulbe capped with a curved screw top, in a satin-lined semi-circular white box. The new half-ounce package with Moment Supreme and Amour Amour perfumes will sell for $10, with Cocktail Dry for $12.

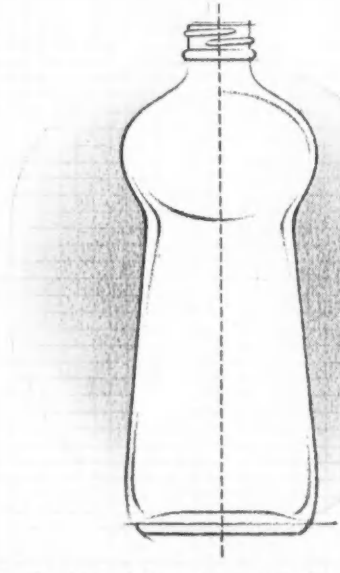
TUSSY COSMETIQUES introduces its newest lipstick shade, Apricot Brandy, in both regular and Permastick formulas, at $1.

How is a glass Salespackage born?



It may be born of the talent of its designer to picture the virtues of a product by the grace and beauty of its container.

It may be born from necessary emphasis on the protection of its contents from every outside influence.



It may be born because a special convenience to the user is needed to insure satisfactory performance under difficult circumstances.

That successful glass SALESpackages are so consistently developed by Owens-Illinois is no accident.

It is the result of systematic research into the problems to be solved and the objectives to be reached in the creation of each Duraglas® SALESpackage by specialists in design, engineering and marketing.

The best answer to your packaging problem may come from a single factor in the birth of a new Duraglas Container but is more likely to evolve from a combination of many skills. Ask us to demonstrate how Owens-Illinois' abilities can be focused on your problem . . . container, closure, label or carton.

DURAGLAS CONTAINERS
AN (O) PRODUCT

OWENS-ILLINOIS
GENERAL OFFICES • TOLEDO 1, OHIO

TOP NOTES

FLOWER of the Month

March — Jonquil
or Daffodil
April — Sweet Pea
or Daisy

MAYBE YOU KNOW HIM . . .

CANADIAN-born NORMAN JONES came to Fritzsche Brothers in 1948 with an exceptional background in the retail selling of pharmaceuticals, perfumes and cosmetics. He graduated in 1931 from Toronto's Ontario College of Pharmacy. Service with T. Eaton & Company contributed greatly to his knowledge of the drug field and his subsequent affiliation with Elizabeth Arden of Canada as sales manager aided similarly in his understanding of the problems inherent in the selling of soaps and the whole wide range of toiletries and cosmetics. With practical experience as his guide, he has been able to offer incalculable assistance to the drug and cosmetic accounts he has served in representing the Fritzsche line in his Metropolitan New York territory. Norman is a sensitive man keenly responsive to the interests and personal preferences of his customers. Some of this sensitivity has undoubtedly been transmitted to and is reflected—musically—in his daughter, Marilyn, who, at 14, is a pianist of great promise and the possessor of one of Nature's rarer gifts—a sense of absolute musical pitch. She is the gem of which he and Mrs. Jones are most proud. Norm is too contented a family man to have many interests outside his own home, but he does indulge occasional fishing and, now and then, a relaxing round of golf. He's a nice fellow to know and we're glad he represents us.

TRUCKS BRING THOUSANDS OF DRUMS OF RAW MATERIALS ANNUALLY VIA FAST FREIGHT ELEVATORS TO OUR TWELFTH FLOOR RECEIVING PLATFORM

HIGH above the traffic and turmoil of New York's crowded streets, deliveries of raw materials from all corners of the earth are made here at our Receiving Department on the twelfth floor of the Port Authority Building. Powerful freight elevators, with accommodations for the largest trucks, provide us the convenience and speed of street-level delivery without the annoying pressure, hustle and congestion of the city's busy thoroughfare. From this point, the sampling and examination of all incoming lots begin . . . here, *quality control* takes over as a first step in the conversion of raw material to the fine compounded creations that will help ultimately to lend beauty and appeal to *YOUR* finished goods.

FRITZSCHE *Established* 1871
Brothers, Inc.
PORT AUTHORITY BUILDING, 76 NINTH AVENUE, NEW YORK 11, N. Y.
BRANCH OFFICES *and* °STOCKS: *Atlanta, Georgia, Boston, Massachusetts, °Chicago, Illinois, Cincinnati, Ohio, Cleveland, Ohio, °Los Angeles, California, Philadelphia, Pennsylvania, San Francisco, California, St. Louis, Missouri, °Toronto, Canada and °Mexico, D. F.* FACTORY: *Clifton, N. J.*

A THOUGHT for the Month:

"He is not only idle who does nothing, but he is idle who might be better employed." —SOCRATES

RECOMMENDATION of the Month

Fresh Lilac

(No. V-722)

Here is a fragrance that is both timely and timeless . . . a really beautiful rendition of fresh flowering lilac for use in spring colognes, face lotions, toilet waters and soaps. Though you seek far and wide, we doubt that you will find a cleaner, fresher, more delightful lilac at $8.50 per pound than this creation of our perfume laboratories. Few florals can match the appeal and consistent popularity of lilac. Sample our FRESH LILAC and you'll understand why.

NEW BUSINESS OPPORTUNITIES OF AEROSOLS

Even as you read these lines, new business opportunities are being created for you by the makers of low pressure aerosols. Continuing improvements in the design, efficiency and attractiveness of these dispensing units are positive factors in assuring an ever growing demand for the packaging of toiletry products in this convenient, easy-to-use form. As an aid to those who are now working on fragrance products suitable for pressure dispersion, we have recently added a number of attractive new odors to our line which have characteristics especially desirable for aerosols. All are long-lasting and stable; none will cause clogging; all are completely compatible with the propellents now in use. They have been fully tested and are moderately priced. If you're thinking of pressure atomized fragrances, be sure to check the merits of these very special numbers before making your final odor selection. Write us for details, samples and prices.

CREATORS of MADE-TO-ORDER FRAGRANCES for PERFUMES, TOILETRIES and COSMETICS

•

ODORANTS and DEODORANTS for INDUSTRIAL and TECHNICAL USE

•

SUPPLIERS of AROMATIC CHEMICALS, BASIC PERFUME and FLAVOR RAW MATERIALS

•

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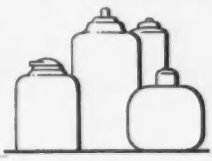
Good Scents

FOR PERFUMERS



HAIR LACQUER ODORS for PRESSURIZED SPRAYS

Numerous inquiries have come to us for medium to low priced fragrances for use in pressure sprayed hair lacquers. The following list includes a nice selection of perfumes in the price range from $4. to $8. per pound:

BOUQUET S-892	$4.00 lb.
TREFLE T-348	$6.00 lb.
APPLE BLOSSOM L-555	$7.00 lb.
DAPHNE H-507	$8.00 lb.
ORIENTAL BOUQUET V-490	$7.00 lb.
GARDENIA V-635	$8.00 lb.

You may obtain ½ oz. working samples of ALL SIX of these compositions by filling in and mailing us the coupon below along with $1.00 check or money order to cover packing and handling.

FRITZSCHE BROTHERS, Inc.
76 Ninth Ave., New York 11, N.Y.

Gentlemen: Please send me ½ oz. samples of ALL SIX of the Hair Lacquer fragrances listed above. Attached is a check (or money order) for $1.00 to cover cost of packing and handling.

Name .....

Title .....

Company .....

Address .....

City ..... **Zone** ..... **State** .....

TRUCKS BRING THOUSANDS OF DRUMS OF RAW MATERIALS ANNUALLY VIA FAST FREIGHT ELEVATORS TO OUR TWELFTH FLOOR RECEIVING PLATFORM

HIGH above the traffic and turmoil of New York's crowded streets, deliveries of raw materials from all corners of the earth are made here at our Receiving Department on the twelfth floor of the Port Authority Building. Powerful freight elevators, with accommodations for the largest trucks, provide us the convenience and speed of street-level delivery without the annoying pressure, hustle and congestion of the city's busy thoroughfare. From this point, the sampling and examination of all incoming lots begin . . . here, *quality control* takes over as a first step in the conversion of raw material to the fine compounded creations that will help ultimately to lend beauty and appeal to *YOUR* finished goods.

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SHE TAKES HER MEDICINES JUST AS WILLINGLY . . . .

. . . POSSIBLY more so, because now, her doctor prescribes medicines that *flavorful* and beneficial. What a blessing to parents—mindful of their children's n to their likes and fears—has been this growing trend in drug manufacture. They, spring, are the ones most grateful for pharmacy's heightened appreciation of As a result of our more than 80 years of specialization, we are frequently consulte matters pertaining to flavors and we know that many of the leading pharmaceuti taste second only to efficacy in importance. In working with these firms, we have b cal aid in solving some of their most difficult flavoring problems—problems inv patibility of ingredients, masking strength, uniformity, palatability and others, and participated in the development of some of the most successful drug flavorings no specific research for such firms, our work has been completely confidential and the have been for each firm's exclusive use. We should like to render *you* the same con

For GOOD TASTE
in Pharmaceuticals *Consult* . . .

FRITZSCHE *Broth*

PORT AUTHORITY BUILDING, 76 NINTH AVE

BRANCH OFFICES *and* *STOCKS: *Atlanta, Georgia, Boston, Mas Ohio, Cleveland, Ohio, *Los Angeles, California, Philadelphia, St. Louis, Missouri, *Toronto, Canada and *Mexico, D. F.* FACTO

SHE TAKES HER MEDICINES JUST AS WILLINGLY . . . .

. . . POSSIBLY more so, because now, her doctor prescribes medicines that are easy to take—both *flavorful* and beneficial. What a blessing to parents—mindful of their children's needs, but also sympathetic to their likes and fears—has been this growing trend in drug manufacture. They, even more than their offspring, are the ones most grateful for pharmacy's heightened appreciation of palatability and flavor . . . As a result of our more than 80 years of specialization, we are frequently consulted by manufacturers on matters pertaining to flavors and we know that many of the leading pharmaceutical houses now consider taste second only to efficacy in importance. In working with these firms, we have been able to render practical aid in solving some of their most difficult flavoring problems—problems involving stability and compatibility of ingredients, masking strength, uniformity, palatability and others, and we are happy to have participated in the development of some of the most successful drug flavorings now in use. In matters of specific research for such firms, our work has been completely confidential and the compositions developed have been for each firm's exclusive use. We should like to render *you* the same confidential, helpful service.

For GOOD TASTE
in Pharmaceuticals *Consult* . . .

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A message from

Philip Chaleyer

President of Ph. Chaleyer Inc.

On our Silver Anniversary, we want to thank all our many friends and clients who have helped in making these first twenty-five years a success.

We are pleased to announce that we are increasing our technical personnel for the development of new products, and enlarging our facilities to give even better service in the future.

Has What It Takes—

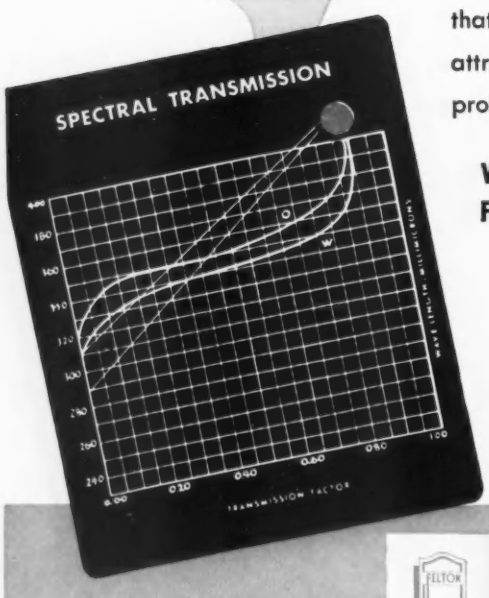
TO MAKE THE BEST SUN-TAN PRODUCTS

FELTON

Sunaromes®

"O"—OIL SOLUBLE "W"—WATER SOLUBLE

SUNAROMES PROTECT AGAINST THESE SUN-BURNING RAYS!



Perfect for Aerosol packing, too!

Just mix Sunaromes with the base you prefer . . . water-gum, water-alcohol, or even water alone. You can also use a cream base, mineral oil, fatty oil, etc. It's the Sunaromes that make them effective sun screens . . . and scent them so attractively. The protection is positive . . . and there is no problem of skin irritation.

WRITE TODAY FOR COMPLETE DATA, FORMULAS & SAMPLES WITHOUT OBLIGATION

SUNAROMES completely screen out harmful rays of the sun between 2900-3100 angstrom units.

SUNAROMES permit sufficient of the actinic rays to reach the skin for a beautiful and healthful tan.

SUNAROMES combine a perfect and tested sun-screen and a wide choice of perfumes, soluble in all media, for easy and simple manufacture.

SUNAROMES are economical to use.

SUNAROMES are non-irritating to the skin and stable in the finished preparation.

SUNAROME Trade Mark Registered U. S. Pat. Off.

Stocks Carried in Principal Cities

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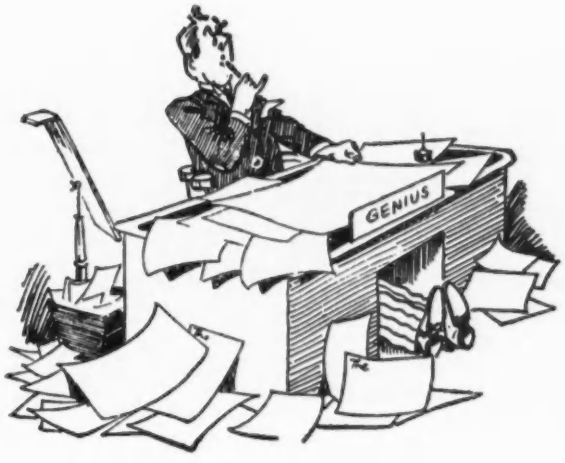
SALES OFFICES: Atlanta • Boston • Chicago • Cleveland • Dallas Philadelphia • St. Louis • Toronto



The Editorial - "WE"

A Principle At Stake In Hearings On Dyes

THERE is a principle at stake in the hearings on the proposal to remove three dyes from the list of approved colors. It is a principle for which the Toilet Goods Association and many of its members have conducted a militant and intelligent struggle; a principle which requires a little clarification in order that this conflict be better understood.

At the present time, coloring materials that have been approved for use in foods, drugs, and cosmetics are known as FDC colors. It has been apparent for some time that the FDC classification is a poor one, for colors that may be harmful in food can possibly be far less harmful in drugs and relatively harmless when incorporated into an external cosmetic preparation, in which it is used in minute quantities.

Now, for the first time, a situation has arisen wherein three certified colors—all of very minor importance in cosmetics—are under attack and may be delisted, because of new evidence that they are not harmless when taken internally as part of a food preparation. On the basis of the evidence now available, and particularly of animal tests in which the dyes were ingested, a pharmacologist of repute has rendered an opinion that these are not harmless colors for foods.

A group less alert to the implications of this matter than the T.G.A. might, at this point, have taken the view that since the particular colors are so unimportant in cosmetics—few manufacturers using them, and probably no one dependent upon them—and since the industry does not want to be tainted with the charge that it would condone the use of harmful ingredients—the delisting of these colors might be wise.

However, the T.G.A. leadership considers this a matter of principle of far greater import, particularly for its possible implications in the future, than might appear on the surface. The mere fact that an ingredient is demonstrated to be relatively deleterious when used in food does not and must not mean that this ingredient should be banned from cosmetics.

The delisting of any colors, in our opinion, should be selective. If FDC colors are harmful in food, let them be banned from food, and become DC or merely C colors, indicating that they may be used in drugs and cosmetics, or only in cosmetics, as the case may be. But to use a yardstick that a cosmetic color must be one that can pass a toxicity test for harmlessness in food certainly does not make sense. And if the law seems to be written in that manner—which we doubt, although this is a legal matter outside of our province—then the law should be changed to conform with common sense and with modern chemical and toxicological knowledge.

The cosmetic industry, in fighting for this principle, is attempting to safeguard itself against the possibility that, in the future, ingredients of vital significance to cosmetics may come under similar attack. It would strike us as quite absurd if the mere demonstration of the lack of safety of a material when used in food and taken internally were sufficient to ban it from use in cosmetics when applied externally.

What Is Harmless, Many People Wonder

ALL of this brings us to the question: what is harmless? Does the absolutely harmless material exist? Obviously, such common food ingredients, such common chemicals found in foods and used in foods, as sodium chloride and sugar, are not entirely and completely harmless. Aside from the very real question of the effects of these materials on those whose biological conditions preclude their use, we are faced with the fact that the average body can ingest only limited quantities of salt and sugar (or almost any other food ingredient known), without feeling the ill effects. Obviously, these materials are not harmless, in any absolute sense of the word. But they are, to the best of man's present knowledge, relatively harmless, and by this we mean that they cannot cause damage to the person in normal biological condition, when taken in amounts that are fairly reasonable. Just what is meant by fairly reasonable is again subject to debate; certainly a relatively nontoxic material should be able to be ingested in amounts double, triple, and perhaps tenfold the quantities usually anticipated; but it is not to be expected that these figures can be a million times larger than usual.

It has been argued by some that colors certified for cosmetic use may find their way into lipsticks, and hence may be ingested when the lipstick finds its way on to food. This is true, but the quantities of lipstick that may find their way on to food are so slight that they can hardly be weighed or measured. Unless a product is shown to have a cumulative toxic effect, which was not contended at the recent hearings, it is doubtful if the dyes could do much harm unless literally hundreds of sticks were eaten. But by that time, the unfortunate victim would be suffering from the ill effects of practically every ingredient in the

Originality . . .

at moderate cost

This trio of truly-original fragrances for perfume, cologne, powder, talc and sachet provide the maximum of distinctive character in long-lasting bouquets.

Natalia . . . Fresh, flowery fragrance with a bewitching Oriental background.
$12.00 per lb. or $1.00 the oz.

Vogue . . . A modern classic—as typical of Paris as the Eiffel tower.
$12.00 per lb. or $1.00 the oz.

Gay Tempo . . . Light, sprightly fragrance which is luxuriously long-lasting.
$10.50 per lb. or $.90 the oz.

Samples for your own tests will be promptly furnished.

COMPAGNIE PARENTO

INCORPORATED

CROTON · ON · HUDSON, NEW YORK

COMPAGNIE PARENTO, LTD.

73 Adelaide Street West, Toronto 1, Ontario, Canada

stick and, for reasons having no relationship to the colors, would be in the hands of toxicologists and psychiatrists.

Let us have intelligent, flexible common sense in the interpretation of the rules regarding harmless cosmetic colors!

Antibiotic Paste To Make Its Debut

WITH ammoniated ions fresh in our memories, chlorophyll not quite a thing of the past, and anti-enzyme still being furiously debated before scientific bodies, Lever Brothers (of Pepsodent and Chlorodent fame) is about to market the first over-the-counter antibiotic toothpaste. This is not the place, nor by any stretch of imagination the time, to evaluate this event, except to say that it will be of major importance. No one can accuse the dentifrice section of the cosmetic industry of lethargy!

Footnote To Claims Of Dentifrice Makers

"IN 20 years tooth decay will be a thing of the past for the coming generation." Is this taken from an advertisement of one of the leading manufacturers of dentifrices? Not at all. It is the opening sentence of a news item published in the scientifically conservative *Chemical and Engineering News*, and is a report of a Dr. Albert C. Sobel of the Jewish Hospital of Brooklyn. Exactly how this is to be accomplished is not made very clear to us in the article. While we look forward to perfect teeth for our grandchildren, we continue to brush our own teeth with one of the highly advertised brands now on the market, hopeful not only that all of its claims are true, but also hopeful in our own fearful manner that rival claims (with emphasis on the dangers to those who ignore the one, the only, and the best in dental-cleaning products) will be proved to be exaggerated, if not wrong, by the verdict of history.

Dentist To Review Ipana Ad Copy

WHEN we read some weeks back that the Bristol-Myers Co. had appointed a dentist to review all the advertising copy of its toothpaste ads, our first reaction was to say, "So what?" This idea seemed so elementary to us that we had just taken it for granted that this was done, not only by Bristol-Myers, but by many others, for years past. However, the medical director of the company states that, in his opinion, the appointment of a dentist at the executive level, and for the particular task, is unique. This being so, Bristol-Myers deserves a round of applause for initiation of a practical and important program in the control of advertising claims. That the company chose a practicing dentist, and not a researcher or professor who had a dental degree, makes their step all the more laudable.

Sunny California Is Taxing Displays

JUST when we were beginning to breathe a little easier about taxes, with the repeal of excess profits, the lowering of personal income payments, and the favorable outlook for a reduction in the cosmetic excise tax to the ten per cent figure, along comes a news item about a new tax in California that we would like to nominate for the Oscar as the greatest nuisance of the year. It is a three per cent levy on the value of every display that is used by a retailer and, according to *American Druggist*, applies to "virtually all fixtures—from simple counter stands to the most elaborate store merchandisers—regardless of whether the retailer has paid for the device or received it free from his supplier." To protect the good name of our publication from charges that it prints intemperate language, we refrain from comment.

Another Tax Proposal Worthy of Rejection

EVERYONE agrees that the government needs money, and everyone feels that a balanced budget is something noteworthy. Like virtue or honesty, who would come out against a balanced budget? Yet, name a given tax, and particularly a new proposal for taxes, and all those who would foot the bill, or who would suffer in their business because their customers must make the payments, clamor against the proposal with vitality and unanimity. It therefore seems futile to raise one's voice each time a new tax scheme is offered that affects cosmetics, flavors, and related items. However, we have before us a news item from Washington: the Treasury Department reportedly is studying an excise tax on soft drinks and candy! More bounce to the ounce? The consumer is the one who's getting the bounce, we would say. We hope this idea never sees the light of day; but we'd hate to be in the position of the Congressman up for re-election a few months after he had voted for this idea. We believe there would be plenty of bounce that day.

Another Advance In Cosmetic Packaging

THE aerosols were handy, convenient, easy to use, but lacked beauty and elegance. Along came the glass aerosol package (as safe as a bottle of Coke, the inventors like to say), and now we have two of Carven's colognes in an aerosol-sprayed alcoholic solution. Mark this in the books as one more technical advance in the field of cosmetics; one more item to be mentioned when someone gives a talk (we reckon it will be our own M. G. de Navarre) on cosmetic progress since the end of the Second World War, or some closely related subject.

Fragrance Foundation Holds Annual Meet

AS this issue of our publication goes to press, the fifth annual convention of the Fragrance Foundation is about to take place. Many of the ideas, proposals, and accomplishments of that dynamic group will be discussed in greater detail next month. Upon the occasion of its fifth birthday, this is a fitting time for us to stop and pause, to doff our hat to a group that has done a herculean job, an exploratory job, with the aid of but a few stalwart workers, and in the face of widespread skepticism from many an old-timer (and old-liner) in the perfume industry.

Five Per Cent Borie Acid in Powders Approved by F.D.A.

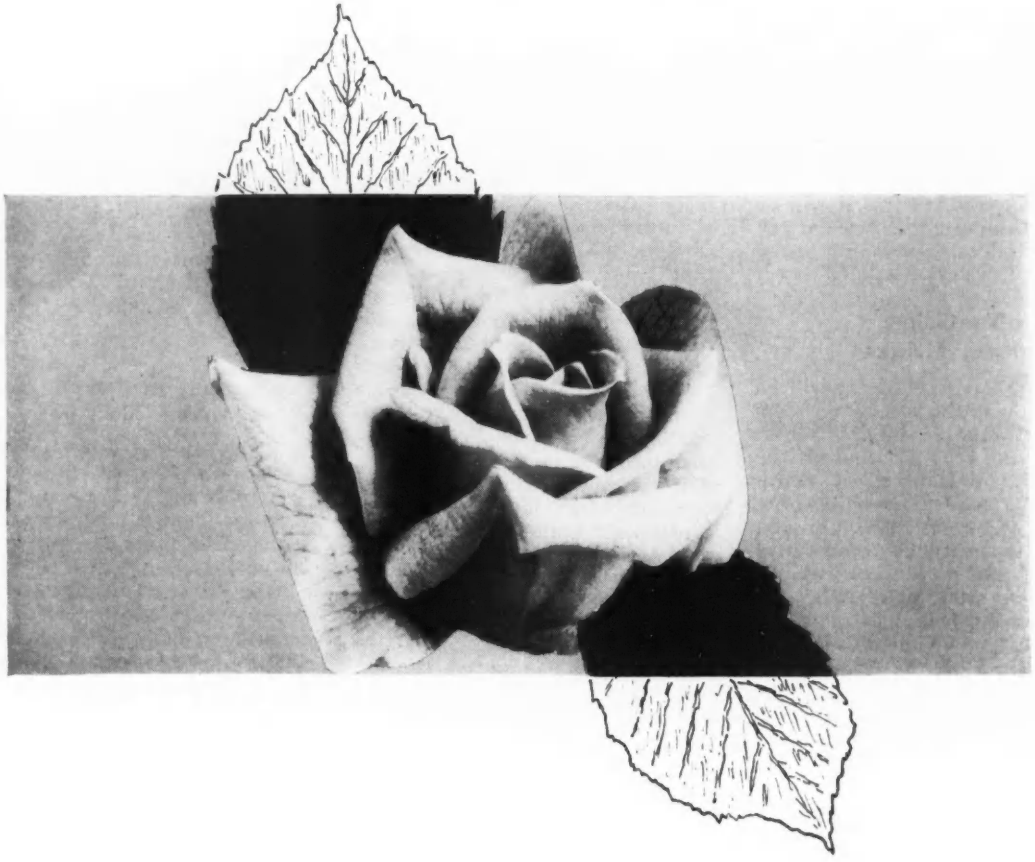
Talcum powders prepared with 5 per cent boric acid do not constitute a hazard, the F.D.A. has announced.

Dental Supplies Not Tax-Deductible, Court Rules

Toothpaste, toothbrushes and similar dental supplies are nothing more than toilet articles and may not be deducted as medical expenses from income tax returns, the U.S. Tax Court in Washington, D.C., has ruled.

ROSE BULGARE SYNTHETIC

dramatic new Rose note from our fine perfumes laboratory. Its fresh and natural qualities, definitely rose in character, permit its use in large proportions as an extender for the scarce and costly natural Rose Bulgare.



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- VANILLA
- FLAVOR BASES

New Products and Developments

Atmosphere Hood

A low cost, light weight portable controlled atmosphere hood is offered by the P. M. Lennard Co. It is constructed of fibre glass plastic material and is stated to create a completely dry, sterile, inert and dust free atmosphere governing contaminate materials and conditions.

History of Cosmetics

The history of cosmetics, a series of articles originally published in Rivista Italiana, begins in the January issue of the always interesting *Givaudanian*. The cover features Jasmonis in an ingenious way to show its graphical structure. A copy may be had by writing to Givaudan-Delawanna, Inc., 330 W. 42 St., New York 36, N. Y.

Jumbo Hydrion pH Test Papers

A jumbo series of Hydrion pH test papers is announced by R. P. Cargille Laboratories, Inc. The new series provides strips twice as wide as the regular hydrion and the rolls are 600 in. long.

Booklet on World Trade

A World Trade Data booklet has been issued by Exporters Digest for 50 cents per copy. In chart form, it presents a wealth of information on mail, telephone, radio and cable message rates and regulations. Overseas import regulations are included as well as credit terms U. S. exporters are granting customers in world markets.

Polyethylene Laboratory Ware

Bottles with polyethylene screw caps, lightweight carboys, funnels and other laboratory wares, are offered by E. Machlett & Son.

Stanton Sales Co. in New York

Stanton Sales Co. is now located in its new offices at 40 E. 40 St., New York 16, N. Y. Murray Hill 3-6742. Mr. and Mrs. Stanton will continue calling accounts in the entire eastern area as well as in the midwest.

Wirz tube decoration is easily removed, eliminates need for separate labeling, and can be used for over-the-counter sales, as are the Wyeth Labs. and Wm. S. Merrell Co. tubes (right).

New Ready-Peel Lithography Reduces Tube Labeling Costs

The development of a new tube decoration process has been announced by A. H. Wirz, Inc., tube manufacturers of Chester, Pa. Ready-Peel strippable lithography, developed by the Wirz Packaging Laboratory, now makes it possible to manufacture attractive collapsible metal tubes with readily removable decoration. Designed especially to meet the needs for removable labels of pharmaceutical tube users, the patent-applied-for process is also expected to reduce labeling costs. Tubes with Ready-Peel lithography are currently being made by Wirz to replace the unlabeled tubes formerly supplied to manufacturers of pharmaceutical products. The new process eliminates the expense of labeling tubes with separately printed labels prior to shipment to customers. In addition to providing an attractive tube that can be effectively merchandised as is, the Ready-Peel lithography can be easily removed from the tube and replaced with the druggist's or physician's individual prescription directions. The Ready-Peel lithography, once removed from the tube, cannot be reused. This feature has been cited as an effective precaution against the unscrupulous reapplication of a highly reputable label to a substitute product, a possible danger when paper labels are used.

Use of the new tube decoration, said to peel as easily as a banana, also eliminates the difficulty of correctly identifying the contents of the tube, a problem frequently arising when conventional labels are lost. Product code numbers can be stamped on the crimp of the tube to provide both identification and comply with federal requirements. Most decorative designs available on standard lithographed tubes can be produced by the new process at comparable cost. The name Ready-Peel is a trade-mark of A. H. Wirz, Inc.

Formulation information on Monsanto Chemical Co.'s brand of bithionol, a bacteriostat for soaps and skin preparations is summarized and given in a bulletin issued by the organic chemicals division of the company.

A comprehensive 88 page manual of cosmetic formulations such as oil in water emulsions, water in oil emulsions, pastes, and protective creams has been issued by Atlas Powder Co., Wilmington, Del. Also covered are typical drug formulas, ointments and ointment bases, transparent emulsions, etc. Five pages of tabular data augment the section on emulsifier selection. The book is spirally bound, illustrated and printed in color. Cosmetic and pharmaceutical manufacturing and research executives may have a copy by writing to the company. To others the book is sold for $2.

Hints

for Improving Production

Adjustable Fog Gun

A new fog gun adjustable from a soft conical fog to a hard driving jet is offered by the Bete Fog Nozzle Co. Adjustment is made by turning a rubber gripped handle one half turn.

All Purpose Pulverizing Mill

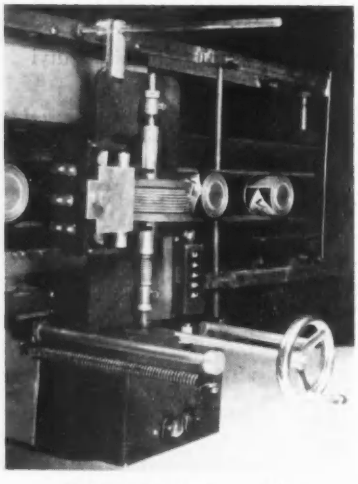
A high speed, all purpose pulverizing mill to meet the exacting requirements of laboratories for testing and research is offered in two models by Weber Brothers Metal Works. Grindings may be quickly produced in one operation, it is stated. Six stainless steel screens of various perforations are supplied with each mill.

Poly Flo Tube Fittings

A new advance in tubing connection practice is afforded by Imperial poly flo tube fittings and polyethylene tubing, according to the Imperial Brass Mfg. Co. No special tools or equipment are needed for installation and fittings may be finger tightened.

Coding and Printing Machine

A new type of coding and printing machine for the tops of cans, boxes or similar objects is offered by the Algene Marking Equipment Co. It may be installed on any conveyor the company states and will mark at the rate of one to 90 objects per minute. It is said to be highly adjustable and operates with economy. Further details about it will be sent on request.



Coding and printing machine

Automatic Action Safety Ladders

A rolling step ladder that is safe is the way the Precision Equipment Co. describes its all steel automatic action safety step ladders. According to the company's description the ladder may be easily rolled to the desired position but as soon as a person steps on it the caster automatically disengages making the ladder immovable. Rubber tipped legs are made to provide a firm grip on the floor. The ladders are supplied in two, three, four and six step models.

Tank Type Pressure Filter

A new tank type pressure filter introduced for use in the cosmetic and its allied industries insures controlled quality of filtration and higher flow rates according to the maker the Ogden Filter Co. A series of synthetic, rigid porous stone membranes upon which a filter aid coating is deposited provide a perfect filtering surface and allow a fast and thorough backwash the company points out. It is available in all capacities in all metals and alloys as well as plastic or rubber lined to meet specific problems.

Processing Literature

A supplementary bibliography of scientific articles on G-11, the trade marked name of the brand of hexachlorophene offered by Givaudan-Delawanna Inc., New York, N. Y., has been published in the Sindar Reporter, a copy of which may be had by writing to the company.

A new how-to-do-it booklet available on request from the Minnesota Mining & Manufacturing Co. tells how tape recordings and colored slides can be combined to convey an idea in an interesting and effective manner at low cost. It is a 20 page booklet entitled "How to make your own slide film presentations for less than $20." Typical situations where this audio-visual method can be applied in sales training, in sales meeting and otherwise, are indicated.

The latest Dodge & Olcott Inc. catalog and price list has been redesigned in an attractive new format carried throughout the 20 pages of the book. A copy is available on request.

A new study of opportunities in television showings of 16mm promotion films on free public service TV programs is covered in a brochure issued by the Princeton Film Center Inc.

How to select better employees is covered in a booklet issued by the Bureau of National Affairs, Inc. Other subjects covered in the series of 17 booklets are how to supervise women employes, how to give instructions and how to get teamwork.

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Criteria for Marketing and Advertising is a pamphlet issued by the Advertising Research Foundation which will be sent to any company interested.

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A free travel expense booklet for salesmen and others attending meetings and conventions is offered by Trip-Charge Inc. It describes possible tax savings. Savings suggested cover expense items of every kind; gratuities, gifts and other aspects of travel expense are described in the pamphlet. The company which offers the pamphlet is a national credit card company; and it is pointed out that card holders are able to charge travel expenses throughout the country including, restaurants, hotels, florists, car rental and retail stores. A copy of the booklet is available on request.

Flavor Section

Aromatic and Terpene Phenylacetates

MORRIS B. JACOBS, Ph.D.

In a previous article in this section of the AMERICAN PERFUMER, I discussed the aliphatic phenylacetates as flavoring components and pointed out that these compounds had relatively wide possibility of application. The difficulties in the nomenclature of this group of compounds, namely, the common practice of spelling phenylacetate as two words and the adoption of the systematic name of alpha-toluate for a time by *Chemical Abstracts* was also considered.

Alicyclic Phenylacetates

Cyclohexyl phenylacetate, $C_6H_5CH_2COOC_6H_{11}$, also known as cyclohexanyl phenyl acetate and cyclohexyl alpha-toluate boils under reduced pressure of 25 mm., at 180.5 deg. C. according to one investigator and under reduced pressure of 3 mm. at 116–117 deg. C. according to another authority. The respective refractive indexes quoted by these two investigators are 1.518 at 13 deg. C. and 1.5142 at 15 deg. C. The density is 1.053 at 0 deg. referred to 4 deg. C. Cyclohexyl phenylacetate is a pleasant smelling liquid with a honey aromatic character. It is available commercially and while few flavor formulations in the literature call for the incorporation of this component, its aromatic character indicates usefulness in honey-like compositions.

Methylcyclohexyl phenylacetates, $C_6H_5CH_2COOC_6H_{10}CH_3$, are a group of homologous alicyclic phenylacetates that are all pleasant smelling liquids. They have very similar physical properties as can be gathered from noting the following constants. Thus *1-methyl 2-cyclohexanol phenylacetate* boils under reduced pressure of 25 mm. at 186 deg. C., its density at 0/4 deg. C. is 1.0374, and its refractive index is 1.512 at 13 deg. C. *1-Methyl 3-cyclohexanol phenylacetate* boils under reduced pressure of 25 mm. at 188 deg. C, its specific gravity at 0/4 deg. C. is 1.0323, and its refractive index is 1.510 at 13 deg. C. *1-Methyl 4-cyclohexanol phenylacetate* boils under reduced pressure of 25 mm. at 188.5 deg. C., its specific gravity at 0/4 deg. C. is 1.0316, and its refractive index is 1.509 at 13 deg. C.

These compounds do not appear to be available as stock items of firms dealing in aromatic chemicals and the flavor application properties are not described in the literature.

Terpene Phenylacetates

A number of the terpene alcohol esters of phenylacetic acid have been fully described in the literature. Some of these are commercially available and have had their flavor and perfume application properties explored.

l-Menthyl phenylacetate, $C_6H_5CH_2COOC_{10}H_{19}$, is a liquid whose physical properties have been fairly well investigated as shown by the citations in Beilstein. Thus under reduced pressure at 39, 34, 15, and 0.25 mm., the respective boiling points are 216, 210-215, 197, and 94-95 deg. C. The density of this compound is given by various investigators as 0.99 at 16.5 deg. C., 0.9887 at 17/4 deg. C., 0.9874 at 20/4 and 1.002 at 20/4 deg. C. The variations are probably due to the fact that materials of different purity were being examined. The specific rotation at 20 deg. C. is about –69 deg. and the refractive index is 1.503 at 13 deg. C. The application properties of this compound have not been explored to any great extent.

Geranyl phenylacetate, $C_6H_5CH_2COOC_{10}H_{17}$, geranyl alpha-toluate is a colorless liquid with a specific gravity of 0.971 to 0.978 at 25/25 deg. C. Its refractive index is in the range of 1.509 to 1.511 at 20 deg. C. Geranyl phenylacetate has a honey-rose odor of a soft character and because of this aromatic character lends itself to use in floral and heavy perfume compositions. It is commercially available.

Rhodinyl phenylacetate, $C_6H_5CH_2COOC_{10}H_{19}$ + $C_6H_5CH_2COOC_{10}H_{17}$, Rhodinyl alpha-toluate is a mixture as the formula indicates of citronellyl and geranyl phenylacetates with the major component probably *l*-citronellyl phenylacetate. Since this material is a mixture its physical constants vary. Those commercially available from Givaudan-Delawanna have a specific gravity of 0.964 to 0.967 at 25/25 deg. C. Rhodinyl phenylacetate has, as one might surmise, a rose odor with a honey character. It is strongly recommended for use in all florals because of its honey-rose odor and is especially recom-

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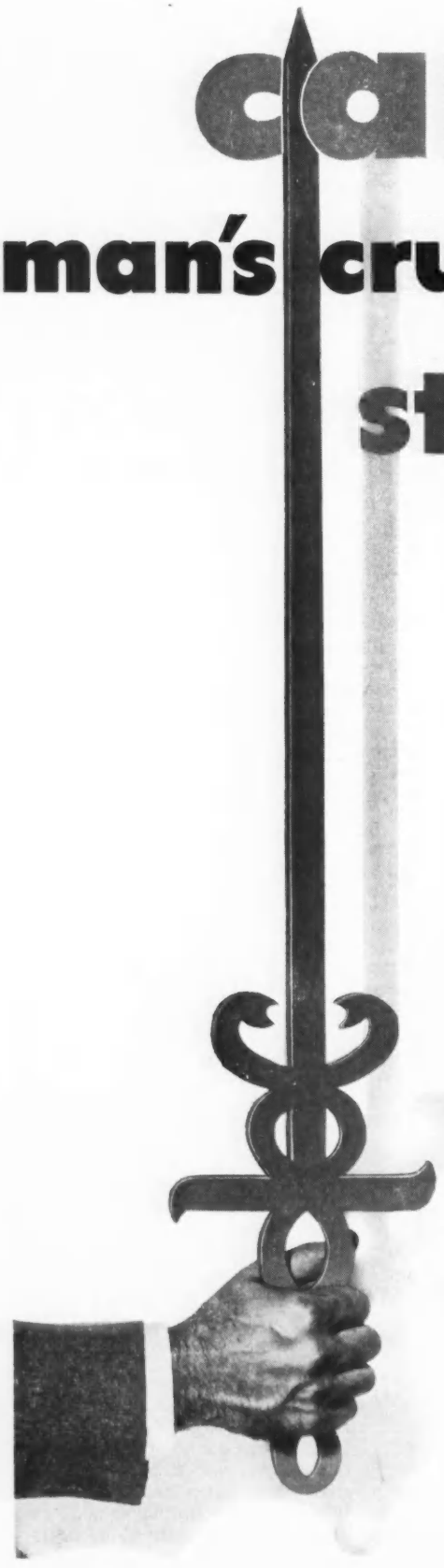

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m-Tolyl phenylacetate and phenethyl phenylacetate have been recommended for use in peach flavor formulations.

mended for incorporation in rose de mai perfume formulations. Its flavor applications have not been given intensive consideration.

Santalyl phenylacetate, $C_6H_5CH_2COOC_{15}H_{23}$, santalyl alpha-toluate is another terpene alcohol ester of phenylacetic acid. This maternal is a viscous oil with a heavy sandalwood odor having a flowery note. Santalyl phenylacetate has a honey flavor and a sweet taste and has been suggested for use in honey flavoring compositions.

Guaiyl phenylacetate, $C_6H_5CH_2COOC_{15}H_{23}$, is an homologous ester. Guaiyl alpha-toluate has a distinct tea-rose odor resembling that of guaiyl acetate. It also has a strong honey flavor and a sweetish taste. It has been suggested as a component of honey flavor formulations.

Aromatic Phenylacetates

Phenyl phenylacetate, $C_6H_5CH_2COOC_6H_5$, phenyl alpha-toluate is a crystalline material melting at 42 deg. C. (35 deg. C. corr.). It boils under reduced pressure of 7mm. at 158 deg. C. It is soluble in alcohol and insoluble in water. This compound is not carried as a stock item by flavor houses and its usefulness is probably limited by the fact that hydrolysis would produce phenol and thus give a medicinal character to a product.

Benzyl phenylacetate, $C_6H_5CH_2COOCH_2C_6H_5$, benzyl alpha-toluate is a liquid which boils at barometric pressure at 317-319 deg. C. and under reduced pressure of 160 mm. and 12 mm. at 270 deg. C. and 175-176 deg. C. respectively. It has a density of 1.0938 at 17 deg. C. This ester is soluble in alcohol and insoluble in water. It is not commonly sold by aromatic chemical firms and its application properties are not well known.

m-Tolyl phenylacetate, $C_6H_5CH_2COOC_6H_4CH_3$, *m*-tolyl alpha-toluate, *m*-cresyl phenylacetate is a crystalline material melting at 49 deg. C. It has a narcissus-like odor, a honey flavor and a sweet taste. The flavor properties of this compound have had some investigations and it has been suggested for use in apricot, honey, and peach flavor formulations. It is a stock commercial item, for it is a relatively common component of such perfumes as jasmine, lilac, and narcissus. It blends satisfactorily with benzyl acetate.

p-Tolyl phenylacetate, $C_6H_5CH_2COOC_6H_4CH_3$, *p*-tolyl alpha-toluate, *p*-cresyl phenylacetate is also a crystalline material melting at 75-76 deg. C. This homologous ester has an odor of narcissus, a honey flavor, and a sweet taste also. The suggestions for its use as a flavoring are more limited in scope than the *meta* isomer being limited to employment in honey flavors like *p*-tolyl acetate. It is recommended for floral soap perfumes, particularly jasmine.

Phenethyl phenylacetate, $C_6H_5CH_2COOCH_2CH_2C_6H_5$, beta-phenyl ethyl phenyl acetate, phenethyl alpha-toluate is a crystaline solid which melts at 27-28 deg. C., nearly colorless liquid at higher room temperature boils with slight decomposition at 330 deg. C. at barometric pressure and under reduced pressure of 28 mm. at 210 deg. C. It has a specific gravity of 1.090. Phenethyl phenylacetate has a honey and hyacinth odor with a rose note, a pronounced honey flavor, and a sweet taste. The commercial product has a specific gravity of 1.080 to 1.082 at 25/25 deg. C. and a minimum congealing point of 26.5 deg. C. This ester is soluble in 3 volumes of 90 per cent alcohol and in 8 volumes of 80 per cent alcohol.

Phenethyl phenylacetate has the widest application of all the aromatic phenylacetates in flavor formulations. It has been strongly recommended for use in honey flavors and in addition has been suggested for apricot, cherry, grenadine, nut, peach, and orange flavorings. Its concentration should, however, not exceed 3 per cent of the concentrated flavor. Phenethyl phenylacetate has wide application in perfumery also. It blends well with many floral perfumes such as jasmine, jonquil, lilac, lily, and narcissus as would be expected from its odor characteristics.

Cuminyl phenylacetate, $C_6H_5CH_2COOCH_2C_6H_4CH(CH_3)_2$, cuminyl alpha-toluate is another in these series of esters whose physical properties have been investigated. It boils under reduced pressure of 18.5 mm. at 222 deg. C., it has a specific gravity of 1.044 at 19.5/4 deg. C., and it has a refractive index of 1.544 at 19.5 deg. C. This ester is not carried as a stock item by firms dealing with aromatic chemicals.

Unsaturated Aliphatic Phenylacetates

In a previous paper I mentioned *allyl phenylacetate* and noted that in this instance the honey character appeared to predominate over the pineapple character usually associated with allyl compounds.

Another unsaturated aliphatic phenylacetate is described in the literature. *3-Hexen-1-ol phenylacetate*, $C_6H_5CH_2COOCH_2CH_2CH{:}CHCH_2CH_3$, is a compound which can be isolated from the last runnings or feints in the distillation of Japanese peppermint oil. It boils at barometric pressure at 299 deg. C. and at reduced pressure of 4 mm. at 135-136 deg. C. It has a specific gravity of 1.00 at 15 deg. C. and a refractive index of 1.4981 at 20 deg. C. This ester does not appear to have the honey characteristics of other phenylacetates for it has an odor like onion and cabbage.

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Regulatory Problems

in the Food Flavoring Field

ALTHOUGH food flavors are used in very small amounts they profoundly affect the acceptability of food, whether it is purchased ready for consumption or is prepared in the home. For this reason, manufacturers have felt justified in making large expenditures of time and funds to develop new flavoring chemicals and new formulations for flavors. Much of their accomplishments in blending flavors is not reflected in the literature and is not readily available elsewhere. This situation does not make the task of the regulatory chemist an easy one in view of the astonishing complexity of some of the formulas of flavors sold for use in food.

The question may be asked, "Why should food law enforcement officials concern themselves with ingredients that are used in such minute amounts in food as are flavors, when they have so many other important obligations, and usually not over-abundant resources to fulfill them?" The answer, of course, rests in the obligation to enforce the statutes that we administer and our desire to enforce them as they are written, to the best of our ability, keeping in mind, of course, a proper balance with respect to all our obligations. These statutes condemn the adulteration and misbranding of food and food ingredients, including food flavors and, in the case of the Federal Food, Drug and Cosmetic Act, adulteration includes the unnecessary use of the toxic ingredient even though in the amount present, it may not necessarily render the food containing it injurious to health. The latter Act, as well as many of the state laws, classes food as misbranded if it contains any artificial flavoring, unless it bears labeling stating that fact. Toxic substances do find their way into food flavors, and thence into the food itself. Gross misrepresentation in the labeling of food flavors does likewise occur.

It was pointed out in the 1952 Annual Report of the Food and Drug Administration that many natural and synthetic flavoring agents have been used in foods for long periods but relatively few of them have ever been critically tested for possible toxicity.

In addition to the toxicity angle, many of us frequently encounter labeling that misrepresents the composition of flavors.

When the situations described above arise, the regulatory chemist may be confronted with samples of flavors for analysis, and the head of the laboratory, with the interpretation of the analysis and the propriety of labeling. In many cases, both chemist and reviewing officer are likely to feel that they do not have the necessary information, or know where to get it, to discharge their official duties, due to the lack of available methods of analysis and lack of standards or other specific regulations for food flavors. Actually, the time we in the Food and Drug Administration can devote to this particular project is minuscule; and I presume from your reports that that may be the case with you also. For this reason, and also because of the difficulties in laying a proper foundation of factual information, problems involving flavors are not always solved in a satisfactory manner, or are not solved, period.

It will be my purpose, in this paper, to alleviate this situation in some degree so far as our experience in the Food and Drug Administration permits, at the same time recognizing that we do not have answers to all of the problems.

Aspects of Flavor of Special Interest

What aspects of flavors are we, as regulatory chemists, interested in? First, we want to know which components, among those that we can determine objectively, belong in a flavor, in the light of the labeling, and which ones that do not belong there are likely to be present. In other words, with what is the flavor in question likely to be adulterated?

Second, we want to know how to isolate and determine the suspect adulterants and, therefore, we are interested in the use of the flavor or food containing it, and the physical character of the sample.

Third, we wish to see to it that household flavoring extracts and indeed all flavorings, have the flavoring strength expected of them, by reason of formal standards, or

*Chief, Beverage Branch, Division of Food, Food and Drug Administration, Dept. of Health, Education and Welfare. Address before Assn. of Food and Drug Officials of the U. S., Hot Springs, Ark. June 1953.

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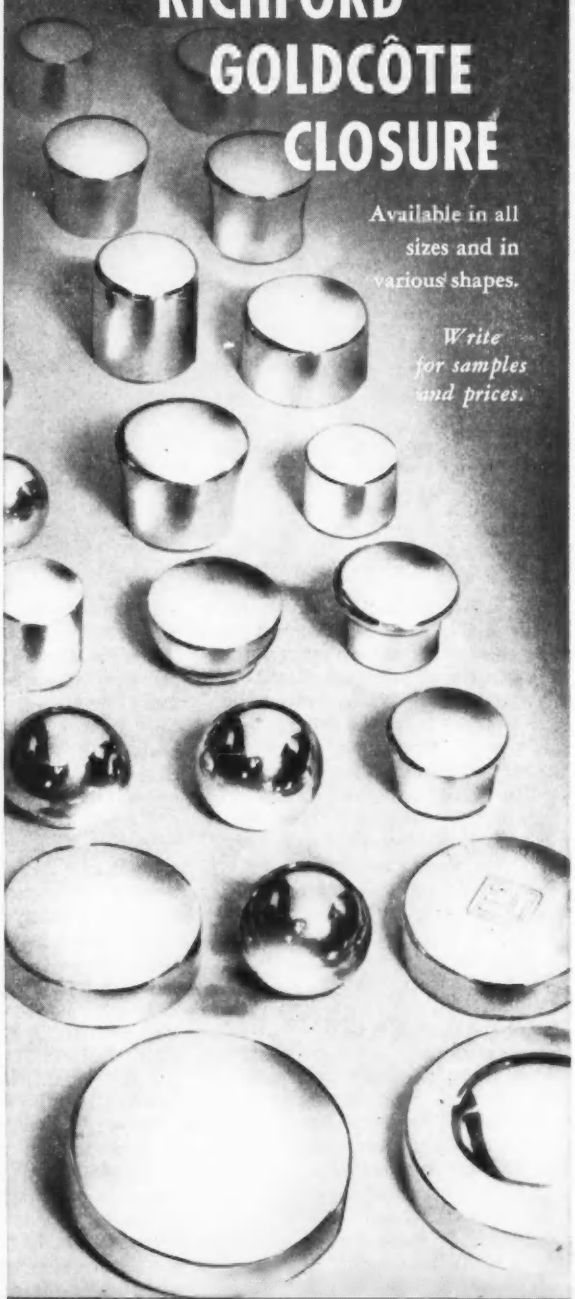

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consumer and trade acceptance over a period of years.

Fourth, we want to be able to decide whether a flavor or a flavored food is misbranded, in view of its composition as disclosed by the analysis.

Certainly these objectives are not the only ones which a regulatory chemist must consider, but they are probably the chief ones. In a paper of this scope, they furnish more than enough material for discussion.

Natural Flavors

LISTED in manufacturers' catalogs, there are ordinarily some twelve or fourteen kinds of commercial fruit or "true fruit" flavors made from the common berry and tree fruits, and from currants and pineapples. Essential oils for food use, single strength and concentrated to various flavoring strengths, comprise a much longer list, perhaps 35 or so. Then there are the miscellaneous flavoring specialties, maple, butter, vanilla, cocoa leaf, kolanut, oak bark, St. Johns Bread, coffee, and chocolate, among others.

The oleoresins for food flavoring use are fewer in number and include oleoresin of capsicum, mace, pepper, ginger, orris, and vanilla.

Table I lists many of the flavoring ingredients that have been isolated from apples, cherries, grapes, peaches, pineapples, raspberries, and strawberries. For more detailed information the regulatory chemist is referred to the publications listed in the table and in the selected bibliography accompanying this paper.

TABLE I
Flavor Constituents of Fruits

Apple White[1], Willaman[2]

Alcohols 92%: methyl, ethyl, propyl, isopropyl, butyl, isobutyl, d-2 methyl butyl, hexyl.

Carbonyl compounds 6%: acetaldehyde, acetone, n caproaldehyde, 2-hexenal.

Esters 2%: ethyl butyrate, ethyl caproate.

Components of other esters:

Alcohols—methyl, ethyl, isopropyl, butyl.

Acids—formic, acetic, propionic, butyric, caproic.

Power and Chestnut[3]

Furfural, acetaldehyde, geraniol (McIntosh apples.)

In free state or in form of esters:

Alcohols—methyl, ethyl, amyl.

Acids—formic, acetic, caproic and caprylic (formaldehyde and valeric acid absent.)

Note: furfural and acetaldehyde in crab apples.

Qualified testers evaluate flavor formulations in organoleptic panel room of Monsanto Chemical Co.'s John F. Queeny plant.

Cherry Nelson and Curl[4]

Montmorency: benzaldehyde, methyl alcohol, ethyl alcohol, geraniol (trace), no phenols.

Grape Haagen-Smit, et al[5]

Acetic, n-butyric, n-caproic and glyoxylic acids; Ethyl alcohol, acetaldehyde, leaf aldehyde (2-hexenl-ol) acetyl methylcarbinol, n-butyl phthalate and sulfur (Zinfandel.)

Power and Chestnut[6] Sale and Wilson[7]

Ester of authranilic acid (none in Vitis vinifera.)

Orange Juice (Valencia) Hall and Wilson[8]

Ethyl alcohol, acetone, acetaldehyde, formic acid, esters of formic, acetic and caprylic acids, an amyl alcohol probably isoamyl alcohol, phenylethyl alcohol, an olefin alcohol ($C_{10}H_{18}O$); (geraniol and terpineol indicated but not positively identified.)

Peach Power and Chesnut[9]

In the volatile oil: acetaldehyde, furfural, possibly cadinene; methyl anthranilate absent, benzaldehyde absent.

After hydrolysis of oil: methyl alcohol, formic, acetic, valeric and caprylic acids, linalyl esters.

Pineapple Haagen-Smit, et al[10]

Winter fruit: ethyl acetate, acetaldehyde, methyl iso caproate, methyl isovalerate, methyl n-valerate, methyl caprylate, methyl ester of five carbon hydroxy acid, sulfur containing compound (methyl beta thio propionate.)

Summer fruit: the foregoing and ethyl alcohol, ethyl isovalerate, methyl n-propyl ketone, ethyl acrylate, ethyl n-caproate, acetic acid, ethyl ester of a C_5 unsaturated acid, methyl ester of a C_5 unsaturated acid, methyl ester of a C_5 Keto acid.

Raspberry Coppens and Hoejenbos[11]

N-caproic and benzoic acids, diacetyl, ethyl alcohols, ethyl acetate, iso-amyl, phenyl ethyl, and benzyl alcohols benzaldehyde, acetylmethyl, carbinol; coumarin menthone and a salicylate were probably present (irone, nerol, and anisaldehyde were not present.)

Bohnsack[12]

Also isobutyl alcohol, 3-hexen-1-01 beta-gamma hexenol (Nerol, anishaldehyde absent.)

Wilson[13]

Beta-ionone not present.

Naves[14]

Beta-ionone in extract from marc. (Kirchner [1949] suggests this may have been a decomposition product.)

McGlumphy[15]

Black raspberries: formic, acetic, benzoic and hydrocinnamic acids, acetone, acetaldehyde, diacetyl, benzaldehyde, isobutyraldehyde, menthone, catechol, ethyl, isoamyl, butyl, isobutyl and benzyl alcohols, menthol, ethyl acetate, ethyl acrylate and ethyl salicylate. (Coumarin, phenylethyl alcohol, beta ionone, irone, anisaldehyde and nerol not found).

Strawberry Coppens and Hoejenbos[16]

Acetic, n-caproic and cinnamic acids, a formic ester, ethyl salicylate

ethyl alcohol, ethyl acetate, butyric and acetic esters of either ethyl or isopropyl alcohol, a benzoic ester, isoamyl n-caproate, dl-isofenchyl alcohol, dl terpineol and l borneol probably as acetates, terpin, fatty acid $C_{18}H_{36}O_2$ (possibly lanostearic acid) keto compound $C_{10}H_{18}O_3$; and an unidentified carbonyl compound, probably diacetyl, acetylmethylcarbinol, n-hexanol acetate, and acetophenone.

Possibly free isoamyl alcohol. (Acetone and methyl alcohol not present).

Presence of acetophenone, diacetyl, cinnamic and acetic acids confirmed. Also found n-butyraldehyde, cisterpinol hydrate, probably ethyl-aceto acetate, and an, as yet, unidentified high molecular weight aldehyde or ketone.

Amyl acetate has been identified in banana (17) and acetaldehyde in pears (18) (19).

Kirchner has pointed out that the flavoring constituents of fruits are usually terpine compounds or pineapple and apple flavoring constituents are aliphatic esters, straw-aliphatic esters and alcohols, i.e., berry flavor, a mixture of terpene esters and aliphatic esters, raspberry flavor, aliphatic esters, and also two aromatic ring compounds.

The flavoring constituents of a fruit, and the flavoring constituents in a flavor manufactured from that fruit may not be identical. Let us consider briefly the method of manufacture of fruit flavors and their composition, because, after all, the regulatory chemist is concerned with the composition of the commercial flavors sold for use in food, and their possible adulterants.

Details of the method of manufacture of commercial fruit flavors are meager. However, more information has become available since the Eastern Regional Research Laboratory, in 1944, developed its process for the recovery and utilization of natural flavors by means of an essence recovery unit.

McGlumphy[15] reported that his firm had set up such an essence recovery unit and was successful in making essences from raspberries, strawberries, cherries, pineapples, peaches, apricots, currants, and blackberries, as well as apples and grapes. After removal of the important volatile constituents, he generally treats the remaining juice with enzymes to remove pectins, clarifies by centrifuging and concentrates to a high degree under high vacuum.

An intermediate step may consist of concentrating by freezing, a portion of the depectinized and clarified juice before removal of the volatile constituents, and recover-

(*Continued on page* 218)

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Soap Section

Palmitic Acid as a Soap Filler

PAUL I. SMITH

MANY soap manufacturers with wide experience of fillers, emulsifying and superfatting agents prefer palmitic to stearic acid for this purpose on account of the greater ease of mixing or blending the fatty acid with the soap. It is most important that when palmitic acid is to be specified, the correct quality and grade should be employed. The colour of the acid should be white and the appearance white, waxy crystals. A purity of 95% minimum is desirable and a melting point of 45.0. deg. with a congealing point of 44 deg.C. The important characteristic of palmitic acid to be used for filling purposes is its stability and lack of any unpleasant odour, both initially and after storage. High quality palmitic acid has a slightly fruity character, with a waxy note, and will not discolour in the presence of soap or other fats. In alcohol (95%) a good quality palmitic acid will be clearly soluble; the presence of turbidity is a positive indication of low grade material. It is, perhaps, not always realized that unlike stearic acid, palmitic is a mixture of myristic, palmitic and stearic acids with the palmitic present in the largest proportion. Being a mixture, the acid is liable to vary slightly in properties, etc., depending upon its origin. To maintain uniformity of quality it is, therefore, important to try and maintain the use of acid from one source.

Appraisal of Terpineol

TERPINEOL has for years been considered to be one of the most important materials for soap perfumery, being used either as a base or by itself. The oil is prepared synthetically on a large scale from turpentine and is found for many essential oils, such as pine, gardenia, orange flowers, etc. It is a viscous, colourless, liquid possessing excellent stability and resistance to discolouration, being stable in the presence of alkalies but not stable with acids. The soap is attracted by this perfumery ingredient because of its economic price, stability and ease of blending with most essential oils and synthetics. Compatibility is of great importance to the soap manufacturer as his product may contain a number of ingredients, any one of which may have a deleterious effect on a perfumery ingredient. Terpineol is one of the most compatible materials as well as being very versatile, lending itself to use as a base in the production of popular lilac and lily of the valley type of soap perfumes and many fanciful odours. When specifying terpineol it is essential that high purity materials should be purchased. Consignments should not differ appreciably in physical properties, i.e. melting point, specific gravity, refractive index and solubility in alcohol.

Soap, Synthetic Detergent Sales Increased in 1953

Total soap and synthetic detergent tonnage sales for the year 1953 were up 3.3% over 1952, dollar sales were up 8%. According to the quarterly Sales Census conducted by the Association of American Soap & Glycerine Producers, Inc. ninety-two manufacturers, representing a very substantial portion of the industry's volume, reported soap and synthetic detergent sales for 1953 totaling 3.5 billion pounds compared with 3.4 billion pounds in 1952. Dollar sales in 1953 amounted to $746 million compared with $691 million in 1952.

Sales of synthetic detergents continued an upward trend, now representing 53.2% of the total market, an 8.2% gain over 1952. Tonnage sales of synthetic detergents in 1953 totaled 1.8 billion pounds compared with 1.5 billion pounds in 1952, up 22%. Soap sales amounted to 1.6 billion pounds in 1953 compared with 1.8 billion in 1952, a decline of 12%. Dollar-wise, synthetic detergents sales in 1953 totaled $425 million compared with $336 million in 1952, up 26.3%. Soap sales were $321 million in 1953 as against $354 million in 1952, off 9.4%.

Liquid detergent sales made a marked advance during 1953. Reported sales of 94.6 million pounds, while still a relatively small portion of the total market, is an increase of 90.9% over 1952.

Regulatory Problems

in the Food Flavoring Field

(*Continued from page* 216)

ing the volatile constituents from the remainder by fractional distillation. Finally, all of the parts are combined with extracts and distillates from the press cake to make the finished "true fruit" flavor.

The Eastern Regional Research Laboratory process has been applied not only to the recovery of flavor from fruit juices but also from batches of fruit and sugar being cooked for the manufacture of jams and jellies. Eskew and his associates published a table showing that from 210 to 1000 lbs. of distillate per ton of preserves, can be obtained from blackberries, cherries, red raspberries, peaches and strawberries. The distillates were made into fruit essences with strength or "potencies" ranging from 12.5 to 50. Potency is defined as the pound of finished preserve corresponding to 1 fluid ounce of the essence. These essences, according to the authors, should be suitable for enhancing the flavor of a wide variety of cooked products.

What are the constituents of these new fruit essences made from batches of jams? Evidently not the same as those isolated from the fruits, since the authors state that cooking develops the flavor of certain fruits, such as blackberries, and in other cases, such as strawberries, desirable flavors not found in the raw fruit are formed.

The natural constituents of apples listed in Table I include both those found in the volatile apple concentrate made by the Eastern Regional Research Laboratory (Milleville and Eskew (1944)) and those identified by Power and Chesnut in 1920 and 1922. A comparison of the two lists shows that at least 13 constituents not reported in the earlier work were identified by the Eastern Regional Laboratory, in their distillates. White suggests that these differences may be due to the fact that Power and Chesnut isolated the constituents they found from apple parings whereas the Eastern Regional Research Laboratory used cold pressed juice. Obviously the *method* of manufacture of true fruit flavors and concentrates is a factor to be considered by the regulatory chemist, since the composition of the fruit essence made by the distillation of the cold pressed juice cannot be used as the sole standard of comparison for true fruit flavors and concentrates made by the process described by McGlumphy. It would appear that the only reliable procedure is for the regulatory chemist to assume that any of the flavoring constituents that have been isolated and identified in any part of the edible portion of a fruit by dependable methods are normal constituents of the corresponding commercial true fruit flavor and concentrate, and only those flavoring chemicals which have *not* been found in fruits can be regarded as added artificial flavors to be declared in the labeling.

Bedoukian reasons that the same fundamental laws govern the production of essential oils wherever they occur in nature, so that the essential oil derived from roses or lavender may conceivably be related to the oil derived from raspberries or peaches. He suggests that further studies on the aromatic constituents of fruits and vegetables will probably result in reports which read like analytical descriptions of well known essential oils.

(*To be continued*)

Fragrascents

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NEWS and EVENTS

Mark K. Dresden, president

Wirz Installs M. K. Dresden as President, Promotes Two

A. H. Wirz, Inc., collapsible tube manufacturers of Chester, Pa., have installed Mark K. Dresden as president of the company, to succeed H. S. Darlington, who retired earlier this year.

Townsend C. Cox
vice president

Robert Cox
vice president

H. S. Darlington
retired president

Mr. Dresden, who was vice president and treasurer of Wirz, is a member of the board of directors of the Pennsylvania Manufacturers Assn. and past president of Delaware County Manufacturers Assn. He is vice president of the Chester Hospital. Formerly with the Scott Paper Co., he joined Wirz in 1935, rising from assistant treasurer to treasurer and vice president. He has been active in civic organizations, including the local Boy Scouts of America.

Also promoted by the company are Townsend C. Cox, vice president in charge of engineering and labor relations; Robert Cox, vice president in charge of production and purchasing, and H. Walter Rowan, treasurer.

Townsend Cox, a graduate of the University of Pennsylvania in industrial engineering and management, worked for Westinghouse Merchant Marine Division before joining Wirz in 1943.

Robert Cox attended Temple, and Pennsylvania State Universities. He joined Wirz in 1942, to work in the production and purchasing department.

H. Walter Rowan was promoted from office manager and chief accountant. A graduate of the University of Pennsylvania and the Wharton School, he specialized in industrial management.

The Wirz organization, founded in 1836, is the world's oldest manufacturer of collapsible metal tubes.

Helena Rubinstein Constructs First West Coast Plant

Helena Rubinstein's first West Coast plant is now under construction at 1925 Maple Ave., El Segundo, Cal.

Cosmetic Excise Tax Cut to 10% Likely April 1

Cosmetic excise taxes will be cut to 10% April 1 if Rep. Reed's bill is enacted into law by Congress. Favorable action is expected.

F.T.C. Chairman E. F. Howrey to Address T.G.A. Meeting

Hon. Edward F. Howrey, chairman of the Federal Trade Commission, will speak at the morning session, May 12, of the annual Toilet Goods Assn. meeting in the Waldorf Astoria Hotel, New York. An excellent opportunity will be presented to manufacturers to meet Mr. Howrey. Griffin Bancroft, CBS Washington correspondent, will also be among the interesting speakers at the annual meeting. The meeting will be held May 11, 12 and 13 and the golf tournament will be held May 10.

Many other interesting papers and reports are being prepared for the meeting, which promises to attract a record attendance.

Celeste Abandons Exclusive Supermarket Distribution

Sole supermarket distribution of the new Celeste cosmetics line has been abandoned and the products will be offered through drug stores and other types of outlets, including Union News Co. newsstands. The line comprises eight fair-traded products, ranging in price from 59 cents for a powder base to 98 cents for a purse vial perfume.

Charles of the Ritz, Consolidated Cosmetics, Revlon Cited

Beauty Fashion Awards for 1953 have been awarded to Charles of the Ritz, for merchandising policy, to Consolidated Cosmetics, Inc. for advertising, to Revlon for promotion, and to Dorothy Gray for packaging.

Surface Active Agents Congress in Paris August 30-Sept. 3

A "World Congress on Surface Active Agents" has been organized by members of the trade association "Chambre Syndicale Tramagras" and will be held August 30 through September 3 at the Sorbonne, Paris, and will be presided over by Prof. Trefouel, director of the Institut Pasteur. Further information may be obtained from the Secretariat General du Ier Congres Mondial de la Detergence, 70 Champs-Elysees, Paris (8), France.

A world-wide synthetic detergents congress has been scheduled for August 30 through September 5, also in Paris.

At the Winter party of the Drug, Cosmetic and Chemical Credit Men's Assn.: chairman Frank Breiter presents the gift from the group to retiring chairman Allan J. MacNiven in appreciation of his efficient service during the past year. Mrs. MacNiven and Mrs. Breiter look on.

F.T.C. Bans False, Misleading Advertising of Antell Goods

F.T.C. has made final an initial decision of the hearing examiner prohibiting false and misleading advertising of Charles Antell Formula No. 9, Charles Antell Shampoo and Hexachlorophene Soap, the N.B.B.M.A.'s Washington Bureau reports.

The order bans claims that Formula No. 9 will prevent baldness or loss of hair; will remedy the cause of cracked or split hair; that lanolin is the only natural oil or grease that is absorbed by the hair or scalp. The order also prohibits advertisements representing that the hormone content of Charles Antell Shampoo has any cleansing action on the hair and requires the company to cease and desist from claiming that its Hexachlorophene Soap is more effective than ordinary soap as a cleansing agent for the removal of dirt and grit. The company has also been ordered to stop misrepresenting its regular prices as "reduced prices."

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Credit Men Hold Winter Party

Staid credit executives laid aside the exactions of business to relax at the well attended annual Winter party of the Drug, Cosmetic and Chemical Credit Men's Association. Left: Monroe Fass, William L. Merilees, Edwin W. Kavanagh, Joseph Wafer and Mr. and Mrs. L. Ronald Booth. Right: Entertainment committee chairman Owen D. Clayton and Mrs. Clayton discuss the interesting affair with Mr. and Mrs. Alfred D. Brookes.

Left: One of the interesting groups was made up of Charles Schneider, Mr. and Mrs. Gustav Wohlfort, George M. White, Mrs. Sherril Kenny, Miss Dorothy Irslinger, Mrs. Charles Schneider and Peter Kenny. Right: No social gathering would be complete without the presence of the dynamic and popular father of the group—Nat Otte. As usual he made sure that everyone had an enjoyable time.

Left: Wesley E. Foster, the Babe Ruth of the group, William Profke, W. W. Jenkins, Harold E. Mix and Charles J. Hewetson offer a toast to the retiring chairman. Right: Edward S. Larkin and Thomas Murray chat with Mrs. Larkin and Mrs. Murray. All agreed that the affair was an outstanding success.

Publicity for the Max Factor Hollywood Salon follows a well-defined line, stressing visits by glamorous personalities. Above, Yoshiko Harada, Miss Japan of 1954, says goodbye to Max Factor, Jr.

Campana Sales Company, Batavia, Ill., became Julius La Rosa's first sponsor following his departure from the Godfrey Show. The scene above in the Campana Laboratory shows La Rosa (center) with Kenneth Schwarzburg (right), chief chemist and his assistant, Clarence Miller.

American Society of Perfumers Hears Talk by Beauty Editor

An interesting discussion of the survey conducted by McCalls Magazine on perfume and the factors that influence the choice of various brands was given by Miss Peggy Bell, beauty editor of that publication, before the February meeting of the American Society of Perfumers.

President Everett D. Kilmer presided and Pierre Bouillette introduced the speaker. The meeting was preceded by the usual friendly social hour, and was well attended.

Officers for 1951 are: President, Everett D. Kilmer; Vice President, Ernest Shiftan; Secretary, William H. Barlow; Treasurer, Herbert G. Kainik; and Directors: Bernard Polak, Paul H. LeLong, Christian F. Wight and Dr. Oliver L. Marton.

Police Raid Nets 20,000 Counterfeit Perfume Bottles

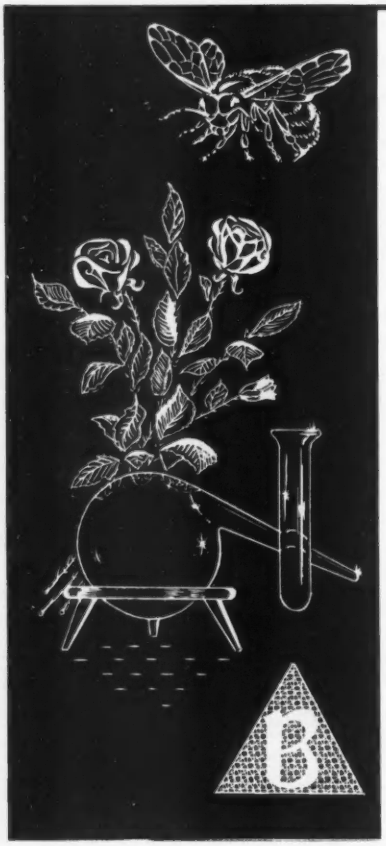
Twenty-thousand counterfeit bottles, ranging from half-ounce to half-pint sizes, of Chanel No. 5, Tabu, White Shoulder, Arpege, Christmas Night, Intoxication, and Shalimar perfumes were seized in a raid by New York City police on the home of William Claus, 53, at 1211 5th St., Brooklyn, N.Y. He was charged by Chanel, Inc. with counterfeiting a trademark.

Pa. Confectioners Hold Eighth Annual Production Conference

The Pennsylvania Mfg. Confectioners' Assn. will hold its eighth annual Production Conference on April 29 and 30 at the Franklin and Marshall College, Lancaster, Pa. Chairman of the conference is Hans F. Dresel, Philadelphia representative of the Felton Chemical Co.

St. Louis Industrial Pharmacy Students Visit Plants

Graduate students of the industrial pharmacy course at the St. Louis College of Pharmacy and Science are obtaining a practical working knowledge by a series of visits to actual plants. Visits thus far made include trips to the plants of the Dorothy Perkins Co., the Monsanto Chemical Co., the Rexall Drug Co., the Lambert Pharmacal Co., and a host of others. The class is being conducted by Prof. C. Lee Huyck.



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Faberge Gains Temporary Fair Trade Injunction

A temporary injunction restraining E. J. Corvette Co., Inc. from selling Faberge products at below fair trade prices has been granted by the Supreme Court of the State of New York, New York county. Corvette operates stores in New York, White Plains, and Hempstead, Long Island, all in New York.

Atjeh Patchouli Supply Seen at Standstill

A virtual standstill in supply of patchouli oil from Atjeh, North Sumatra, main producing area of patchouli, is expected following an armed revolt, the Djakarta office of N.V. Internationale Crediet-en Handels-Vereeniging "Rotterdam" reports.

The office also reports a firm undertone in citronella oil, and a further though possibly slow rise in prices. The Rotterdam office sees demand from France and Germany for the oil on the increase, and also increased interest by Swiss buyers.

In regard to cananga oil, the Djakarta office reports firmer prices following active dealings, with the closing of large contracts for export to Europe and the United States.

Vetivert oil is described as inactive, with Bourbon and Java vetivert finding the going difficult because of the price-difference of Haiti oils.

Supreme Court Fails to Invalidate State Fair Trade Laws

The U. S. Supreme Court has refused to review the decision of the fifth U. S. Circuit Court of Appeals decision in the Eli Lilly & Co. vs. Schwegmann Bros. case, thus failing to inactivate state fair trade laws.

Polak & Schwarz, Inc. Takes Over Albert Albek, Inc.

Albert Albek, Inc., of Culver City, California, have merged their operations with Polak & Schwarz, Inc., and will hereafter be known as Polak & Schwarz, Inc., West Coast Division.

The entire Albert Albek staff will remain in its present capacity. The local laboratory and manufacturing departments will function as heretofore with the added advantages of complete cooperation with Polak & Schwarz, Inc., whose vast and successful experience both in this country and abroad will enhance the ability of this West Coast Division to serve its clientele.

New Pentaerythritol, Formaldehyde Plant Opened in Canada

A new Canadian plant, with a capacity for 30 million pounds of formaldehyde and 3 million pounds of pentaerythritol, has been opened by St. Maurice Chemicals, Ltd., which is jointly owned by Heyden and Shawinigan Chemicals, Ltd. of Montreal.

Indonesia Reports January-May Essential Oil Export Figures

Essential oil export figures have been received from the Indonesian Government Statistics Department, covering the first five months of 1953, the N.V. Internationale Crediet-en-Handels-Vereeniging "Rotterdam" reports.

In regard to citronella oil, Formosan oil quotations were slightly lower, but recent reports indicate that the production for August-September was much lower than expected, and that a rise in price is expected by Formosan and Hongkong dealers.

The Java oil prices, however, remained very steady through May, and fluctuated between extremely narrow limits. The total export figures for citronella oil from the Government Statistical Bureau was reported as May, 61,171 kilograms net, January-May, 219,944 kilograms net.

As to patchouli oil, the market in Malaya advanced and reports indicated that supplies in Penang are very low. The latter has been confirmed by increased buying on the Medan market by Chinese dealers at prices which can only be profitable if the oil is smuggled to Malaya.

Reports from New York and Europe indicate a hardening of the market. The export figures for May totaled 1,625 kilograms net, for January-May, 4,792 kilograms net.

Cananga oil prices remained quiet with small changes, but the undertone was firmer after slight dealings, and the few lots, after a long time, were sold to New York and Europe. Interest is seen developing in the U.S. and Europe at the present level of prices. The official statistics are: May total, 851, January-May total, 3,598 kilograms net.

The vetivert market looked up during January-May, and a few contracts between Europe and Japan were seen possible. Some New York buyers showed interest. Vetivert oil export totaled 171 kilograms net for May, 354 kilograms net for January-May.

"How to be beautiful" is the theme of the new Ern Westmore Show, Monday through Friday over the ABC television network. Westmore (left), noted Hollywood beauty expert, is seen presenting his daily Lucky Lady with a Juliette Marglen manicure tray, a daily feature of the show. Giving the trade's welcome to the new show is (right) Tom Colesant, member of the Hair Fashion Committee of the National Hairdressers and Cosmetologists Assn.

ANNE WRIGHT, executive vice president of Christian Dior Perfumes Corp. has been named general manager of the company. She will leave for Paris soon to confer with Mr. Dior and the French officials on future plans for the company.

WALTER UPHAUS, export traveling representative of Max Factor & Co., left Hollywood on January 5 for a six months' tour of Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama and Ecuador.

WILLIAM F. FORD has been appointed by Lehn & Fink Products Corp. as regional sales supervisor of the south-eastern states, with headquarters in Charlotte, S.C.

KATHLEEN SPENCER CORY, formerly with Macys, New York, Peggy Sage Inc., Elizabeth Arden and Coty, has been appointed beauty editor of Harper's Bazaar.

MEL PECK has been appointed Texas-Oklahoma representative for Florasynth Labs., Inc.

HAROLD C. GREEN formerly with L. Sonneborn Sons Inc. is now eastern regional sales manager for Strong, Cobb & Co.

R. T. Dobson, technical director in the U.K. of Chesebrough Mfg. Co., chats with Cyril A. Williams at British S.C.C. meet.

C. A. Williams Guest-of-Honor at British S.C.C. Dinner

Cyril A. Williams, secretary of the Toilet Preparations Federation, was speaker and guest-of-honor at the annual dinner and dance of the Society of Cosmetic Chemists of Great Britain held January 22 in London.

The function was attended by members and their friends, representatives from manufacturing, advertising and supply concerns as well as technical people.

Left to right: Mrs. Evelyn Forbes, beauty editor of Vogue in the U.K., and speaker at a recent meeting, with S.C.C. president Dr. Robert H. Marriott, Mrs. Marriott and Hugo of Vogue.

Society of Flavor Chemists Holds First Regular Meeting

The Society of Flavor Chemists held its first regular meeting on February 1 at the Little Venice Restaurant, New York City. Technical representatives of most of the leading suppliers of basic flavoring materials were present. The purpose of the organization is primarily social, but occasionally informal talks on matters of mutual interest will be the order of business. Jack Bouton was elected temporary chairman at this meeting and those interested in the group may contact him at Synfleur Laboratories, Monticello, New York.

Q-W Laboratories Wins Compressed Face Cloth Injunction

The United States Court of Appeals has granted Q-W Laboratories a permanent injunction prohibiting Facelettes and Betti-Pearson, Inc. from future manufacture or sale of Quettes, tiny pellets, which, when dropped in water, expand to full size Cannon face cloths. Q-W Laboratories sells the product under the name Quettes; Betti-Pearson, Inc. of Cambridge, Mass., had been selling them as Facelettes.

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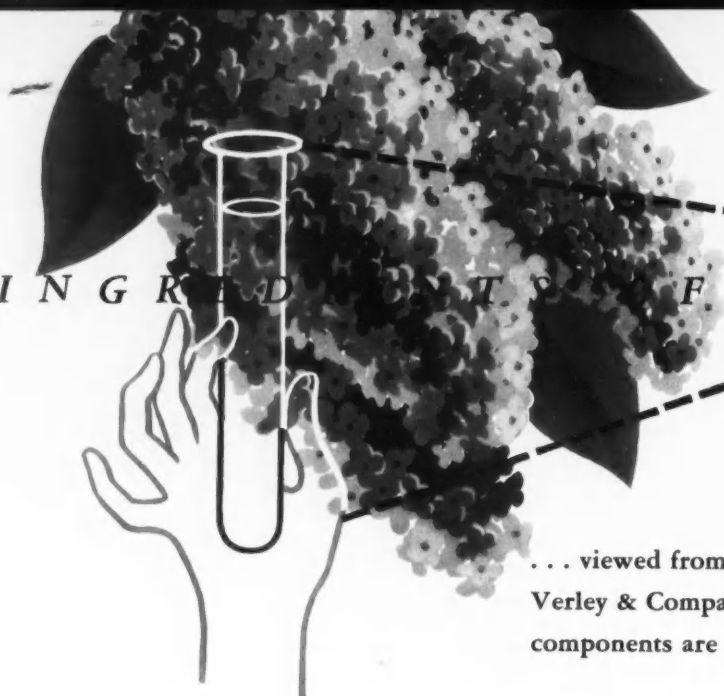

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We think that we can aid you in attaining that fulfillment—on any product, in any of the major classifications of odors.

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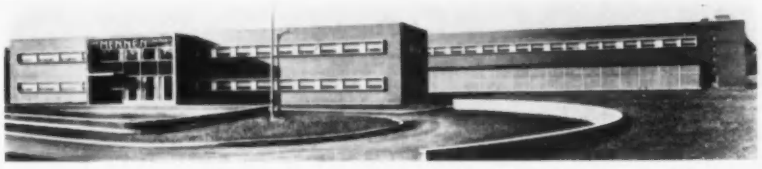
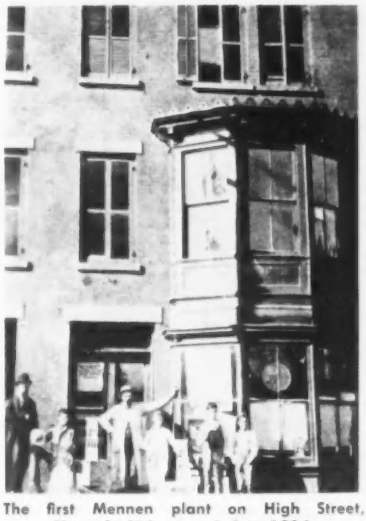


The modern new Mennen plant located on a 100-acre site in Morristown, N.J.

McGraw-Hill Publishes Book Tracing Mennen Co. Story

Coincident with the 75th anniversary of the Mennen Co., McGraw-Hill has announced publication of "The Mennen Story" by Alfred Lief. It traces the development of the concern from the opening by founder Gerhard Mennen of a tiny drugstore in Newark's downtown business section to the modern new Mennen plant, with its nationally distributed toiletries, opened in 1953 on a 100-acre sit in Morristown, N.J.

It recalls the days Gerhard Mennen bought a horse and wagon, hired a minstrel singer, and toured the New Jersey hinterlands, often going into Pennsylvania and New York State. After the entertainer had attracted a good-sized crowd, Mennen would tell about his corn-plaster, but instead of selling it he would refer his audience to their local drugstore. After Gerhard Mennen died at 45, his young wife ran the business; their son, William G. Mennen, joined the business in 1908, beginning at the bottom before becoming a vice-president in 1912.



The first Mennen plant on High Street, Newark, N.J., occupied in 1894.

All India Essential Oil & Perfume Mfrs. Assn. Organized

At the inaugural meeting of the recently formed All India Essential Oil & Perfume Mfrs. Assn. the following were elected: president, Shri Madan Lal Jain, B.A.; vice-president, Shri R. Z. Patel, B.A.; honorary secretary, Shri Shri Chand Jain, B.Sc., A.H.B.T.I.; members: Shri Ram Saran Das and Shri N. N. Gokhle; and patrons of the association: Dr. Sad Gopal, D.Sc., F.R.I.C., and Dr. K. L. Moudgill, M.A. (Cantab); D.Sc. (Glasgow).

The meeting was presided over by Shri R. Z. Pate, B.A.

The association seeks to organize the industry so that it may have an effective voice in framing new and seeking redress in already framed government policies, and its sponsors have already stressed to the goverment's Industrial Advisory Board the need for free import of aromatic chemicals for actual users; rationalization of the rate of import duty on raw materials, provision for duty free alcohol for the resinoid extracting industry, and checking of further establishment of foreign companies for the manufacture of blended perfumes. The association has been invited by the Indian Standards Institution to help them in formulating standards for Attars, so that this material may be used in perfume blending.

St. John's U. College of Pharmacy 25 Years Old

St. John's University College of Pharmacy will celebrate its 25th anniversary on April 21 and 25.

Prince Matchabelli Appoints Four to Sales Posts

Four new sales appointments have been announced by Prince Matchabelli vice-president Wm. P. Jeffery, Jr. They are: J. Stuart Carswell, representative in New York City, Philadelphia, Baltimore and Washington; Miss Bette Fulghum, who takes over the sales territory of Virginia, West Virginia, Kentucky and Tennessee; and traveling representatives Roy Healy in New Jersey and part of New York State and Robert Burbridge in the midwestern and southern territories.

F.T.C. Attacks Hayr's Baldness Prevention. Hair Growth Claims

Advertisements that "Hayr Application for the Scalp and Hair" will prevent baldness and cause hair to grow on bald heads are false and misleading, according to a complaint filed by the Federal Trade Commission against Hayr Chemical Co., Inc., Newark, N.J., its officers, Phillip Kalech, Dr. Joseph Caspe, Nathan Kalech and Myrtle L. Larsen, and the Louis F. Herman Advertising Agency, the N.B.B.M.A.'s Washington Bureau reports.

The F.T.C. charges the following representations to be misleading: That the plugging of hair follicles with foreign matter is a cause of diminished hair growth, excessive hair loss, baldness or dandruff; that the removal of foreign matter from the hair follicles by the use of "Hayr" will correct a cause of diminished hair growth, excessive hair loss, baldness or dandruff; that the removal of foreign matter from the hair follicles by the use of "Hayr" will increase hair growth, prevent excessive hair loss or baldness or eliminate dandruff; that the use of "Hayr" as directed or otherwise will cause hair to grow on bald or partially bald heads.

The F.T.C. complaint states the formula for "Hayr Application for the Scalp and Hair" to be: water—18.1%, isopropyl alchohol—48.8%, thyroid powder—.035%, resorcin—.65%, oleic acid—.75%, neutronyx 333—.35%, natural oil of cade—.05%, lactic acid U.S.P.—.82% and perfume—.145%.

Phillip Kalech, an officer of Hayr Chemical Co., named as a respondent in the F.T.C. complaint, was associated with the early marketing successes of "Toni" and "Tintair", both of which utilized "saturation-type" promotional methods.

$3,000,000 House of Carl Weeks, Armand Co., Sold

Salisbury House, Des Moines, the 12-room, $3,000,000 "house that face powder built," has been sold for $200,000 to the Iowa State Education Assn. to be used as the organization's headquarters. It was built in 1928 by Carl Weeks, president of the Armand Co.

Atlas Powder Co. Builds Two Esterification Plants

Atlas Powder Co., Wilmington, Del., has started construction of two esterification plants, one at Memphis, Tenn., and the other at Brantford, Ont.

KOMMON/ SCENTS!

Most controversial figure in the country today appears to be the President of the United States. The Democrats praise him for adopting New Deal-Fair Deal policies; Republicans, because he's proving the inefficiency of New Deal-Fair Deal policies.

• • •

Eisenhower will be remembered for several contributions to this country's history. But it is doubtful whether he will have any competitor as a leader respected for completely opposite reasons.

• • •

The President's stand on the Bricker Amendment is believed by many to have been his declaration of Republican Party independence. There are some so bold to believe that Eisenhower was nearly as independent as when he defeated the Conservative forces at the Republican National Convention.

• • •

The Democrats are having their hands full trying to convince the voter that the man who is allegedly using their policies is a reactionary. It's a contradiction in terms, like trying to convince a baseball manager that a power hitter is one who hits a long fly to the infield.

• • •

Among major blessings in the Eisenhower controversy with Senator Bricker is the absence from Page One for awhile of Senator McCarthy. For awhile, highly taxed people were beginning to wonder whether it was more important to get the Red out of the country or vice versa.

• • •

The position of Secretary of State John Foster Dulles has been strengthened by time. Originally pre-election supporter of the Bricker Amendment, he seems to have learned that it's easier to rap the opposition than to achieve rapport in one's own party.

• • •

The Cosmetic Industry maintains its traditional aloofness in things political. The way business is going, the difference between a Democratic administration and Republican is like the talk about Recession and a Depression: There are those who say there's no difference and others who say there's no trouble.

George Fiedler

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PERFUME COMPOUNDS and SPECIALTIES

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CHICAGO 5, ILL., 701 South La Salle Street
CINCINNATI 30, OHIO, 7481 Shamrock Lane
TORONTO 18. ONT. CANADA, R. M. Ferguson & Co.
81 Dunedin Drive

Canadian Toilet Preparations Soar to $37,381,000 Peak

Led by a 71 per cent increase in home permanent wave kits, the value of Canadian-made toilet preparations surged to an all-time peak of $37,281,000 in 1952, nearly 21 per cent more than the 1951 total of $30,873,000, the Dominion Bureau of Statistics reports in revised report of the toilet preparations industry. The fourth new record in as many years, this was almost three times the $13,434,000 output of 1942.

Value of home permanent wave kits, including refills and accessories, was $3,418,145, a $1,423,203 advance over 1951. Sales of non-alcoholic hair tonics, liquid brilliantines and wave sets to barbers and beauty parlours declined to $1,228,472 from $1,240,458, but other sales jumped 45 per cent to $1,421,414 from $981,197; sales of alcoholic types to barbers and beauty parlours and to others were down, but output of solid brilliantine was up. Liquid and cream shampoos climbed 39 per cent to $3,368,942 from $2,427,151, but shampoo powders declined to $113,712 from $121,666.

Output of alcoholic toilet waters, colognes and lotions increased to $4,222,455 from $3,991,034 in the preceding years, while non-alcoholic varieties rose to $191,920 from $16,720. Production of alcoholic perfumes declined to $920,487 from $1,014,852, but personal deodorants climbed to $1,700,00 from $1,334,430. Output of bath salts and oils increased to $397,121 from $376,064.

Value of lipsticks and refills jumped 28 per cent to $1,392,814 from $1,090,984, while rouge and refills dropped to $177,557 from $216,649, face powders to $1,297,168 from $1,369,604 and talcum powders to $1,497,153 from $1,509,667. Solid creams of all kinds, including almond cream and cold cream, rose to $2,579,520 from $2,379,249, and liquid creams to $922,557 from $601,509. Manicure preparations advanced to $624,867 from $620,734.

Ammoniated tooth pastes slumped to $380,704 from $524,071 but other tooth pastes were up 31 per cent to $5,749,777 from $4,476,292. Ammoniated tooth powders declined to $137,220 from $184,177, and other tooth powders to $473,701 from $476,933. Liquid dentifrices increased to $15,553 from $9,744.

Less than 64 per cent of the 1952 total was produced in the toilet preparations industry as compared with over 71.5 per cent of the Canadian output a decade earlier. The balance is manufactured as secondary products in a number of other industries, mainly by drug and soap firms. The toilet preparations included 101 concerns in 1952, four more than in 1951, and gross output value (including such secondary products as medical preparations, insecticides and soaps) was $27,059,783, a 20 per cent jump from $22,535,080. Value of the industry's production of toilet preparations was up to $23,819,000 from $194,268,000.

During 1952 Canadian imported $904,186 worth of toilet preparations, appreciably more than the $646,619 worth imported in 1951. Exports were up more moderately to $123,268 from $115,196.

Among the employees honored by Coty, Inc. for 25 years service with the company are (seated left to right with president Philip Cortney), Mary A. Fleming, Ethel Johnson, Pauline A. Krause, president Philip Cortney, Helen M. Morandini, Helen M. Nelson, and Ellen J. Palmer; standing, John Zwick, Albert Scanlan, Mary C. Vicin, Henry F. Kriete and Anthony Castiglia.

New D&O Organic Research Lab. Rebuilt Analytic Department

Dodge & Olcott, Inc. has added a fully equipped laboratory for organic research and a completely rebuilt analytic department to its facilities at 180 Varick St., New York. The new laboratories will be under the supervision of Willem Lasthuysen, who will be assisted by Dr. Edward Schildtknecht in the organic research laboratory.

Funjab Government Reported Banning Counterfeit Cosmetics

The Funjab government is reported to have directed all District Magistrates in the province to keep a strict watch on the activities of persons who are suspected of manufacturing locally popular brands of foreign cosmetics and selling them as imported articles, an offense under the Pakistan penal code.

Coty Bestows Awards on 19 Veteran Employees

Nineteen veteran Coty, Inc. employees were guests of honor and the recipients of gold and silver medals at a gala evening party in the Grand Ballroom of the Hotel Astor, New York.

The medals were presented by Coty president Philip A. Cortney. Winners of the Gold Medal Service Award, denoting 25 years of employment were: Henry F. Kriete, Martin A. Mutterer, Anthony Castiglia, Mary A. Fleming, Ethel A. Johnson, Pauline A. Krause, Helene A. Morandini, Helen M. Nelson, Ellen J. Palmer, Albert Scanlan, Mary C. Vicin, and John Zwick.

Receiving the Silver Medal for 15 years with the company were: Fanny L. Guilfoyle, Elizabeth Heese, Lucille Mazzocchi, Olav Stokke, Dean H. Caziarc, Jean R. Gayout, and Agnes M. Coughlin.

The presentation ceremony was followed by entertaining and dancing.

India Concern to Process French Perfumes

Processing of French perfumes is being planned by Lakme, new Tata concern in India, in association with Robert Piquet and Renoir of France.

Aims to Increase Essential Oil Production in India

The Uttar Paradesh (India) government is reported to have completed an assessment of the state's floral wealth with a view to setting up a first-rate perfumery in Lucknow. Through improved means of production it is hoped to double or treble the output of essential oil and "itrs", reports indicate.

Equipment Consultant Service Established by Straygold

Complete plant set ups on production, packaging and layout of equipment is available to clients of

J. B. Straygold

J. B. Straygold Associates, 18 E. First St., New York 3, N. Y. This service is available as well as other consulting services to manufacturers.

Sales Obstacles Shown by New York's City College Survey

Price-cutting, buyer hesitancy to place firm orders, customer reluctance to change supplies and difficulty in better dealer cooperation are among the major sales obstacles which outside salesmen have to overcome according to a survey recently undertaken by New York's City College Baruch School of Business.

Point-of-Purchase Advertising Institute to Hold 3-Day Meet

The Point-of-Purchase Advertising Institute will hold its eighth annual symposium and exhibition on March 30, 31 and April 1 at the Hotel Statler, New York.

Mich. Chemical Trade Group Feature: Sing for Your Supper

"Sing for Your Supper" was the featured bill at a meeting of The Chemical and Allied Industries Assn. of Michigan on February 22 at the Leland Hotel, Detroit, Mich.

New York BIMS Announce 1954 Golf Schedule

The BIMS of New York has arranged the following golf tournament schedule for the 1954 season: June 24, Knoll Club, N. J.; July 20, Winged Foot, N. Y.; August 17, Wheatley Hills, L. I., N. Y., and September 21, Wykagyl, N. Y.

Court Order Extends Injunction in Copper Tan Case

Copper Tan, Inc. is under an extended injunction prohibiting the firm from using Copper Tan or other convenient synonum, in the marketing of its products. The ruling was made by the United States Court of Appeals in New York following a suit brought by Douglas Labs. Corp.

The District Court had previously ordered the registration of Copper Tan cancelled.

TV Demonstrations Featured at International Beauty Show

Closed circuit TV for cosmetics demonstrations was employed at the International Beauty Show March 8 through 12 at the Hotel Statler, New York.

Two Credit Groups Hold Joint Philadelphia Sessions

The first annual joint session of the Drug, Cosmetic and Chemical Credit Men's Assn. and the National Chemical Credit Group was held February 24 and 25 at the Penn Sherwood Hotel in Philadelphia, Pa.

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Hazel Bishop Settles Suit for $310,000

Hazel Bishop has settled her suit against Hazel Bishop, Inc., Raymond Spector Co. and six others for a stipulation which will eventually bring her $310,000 for her approximately 8 per cent stock in Hazel Bishop, Inc.

Terms of the agreement provide that she sever all relations with the cosmetic company she founded, that the case may not be brought up again for action, that her letterheads indicate clearly that any of the names she may use in business is not connected in any way with Hazel Bishop, Inc., and that she assume the obligation for halting any other legal actions pending. The last agreement refers to a stipulation from a previous case, and requires her to pay $15,000 to Paul Petrus. Mr. Petrus owned 9 per cent of the Bishop, Inc. stock at one time and had brought suit that he was forced to sell his holdings under duress.

Chairman and 92 per cent owner of Hazel Bishop, Inc. is Raymond Spector, of defendant Raymond Spector Co., an advertising agency. Mr. Spector states that litigation in the stockholders' suit, filed nearly two years ago, has cost him about $300,000 so far. It is estimated that it will cost him more than $600,000 to gain virtually complete ownership of Hazel Bishop, Inc.

The cosmetic company is said to have netted more than $10,000,000 in sales last year. According to Mr. Spector, the company developed from one having $20,000 in debt to one doing a $10,000,000 volume in less than four years. According to one survey, Hazel Bishop lipstick has 50 per cent of an estimated $35,000,000 retail level lipstick business. Sales of Complexion Glow in 1952 were $773,523.17 in 1952; $887,726.76 in 1953. According to Mr. Spector, they are currently at the rate of $2,000,000 a year, about two-thirds of the total rouge business.

According to Mr. Spector, Hazel Bishop products are sold in 140,000 retail outlets, although the company has only six salesmen. He said that the firm is now spending $5,000,000 annually for advertising, making it the 51st largest national advertiser and the twentieth largest television advertiser.

Soviet Russia Reported Doubling Perfume Production

Increased perfume production quotas for perfume factories "New Dawn" in Moscow and "Northern Lights" in Leningrad are reported. Output has been scheduled to approximately double that of 1953.

Sees Possibily New Way to Fill Tooth Cavities

Cavities may be repaired with materials that allow calcium and phosphate mineral crystals to grow into them, producing fillings indistinguishable from real teeth, Martin Burger of the Chemistry department in the Jewish Hospital of Brooklyn suggested to a scientific conference of the American Chemical Society's New York Section. Dr. Albert Edward Sobel, head of the hospital's chemistry department, was co-author of the report.

Mr. Burger and Dr. Sobel believe that they have synthesized in the test tube the chemical ingredients responsible for mineral deposition in teeth, and believe that they can be synthesized by combining collagen, a protein found in bone and skin and widely used in the manufacture of gelatine, with chondroitin sulfate, a solid, insoluble substance.

"This may be regarded as the beginning of a new chapter in the understanding of the process of calcification," Mr. Burger commented. "We are planning to prepare, in various ways, collagen in combination with different kinds of chondroitin sulfate to see how closely bone and dentin can be simulated; also, chondroitin sulfate will be combined with keratin, the key protein of tooth enamel, to see if it will initiate the formation of the mineral crystals found in tooth enamel."

Robert Barnes, Dorothy Gray's California representative, has been given the Distinguished Salesman's Award. Above, he is flanked by approving bosses, president Joseph Keho and general sales manager James Boohecker.

Plough Buys Nujol, Mistol from Esso Standard Oil

Plough, Inc., Memphis, Tenn., has bought Nujol, a medicinal mineral oil, and Mistol, a medicated nose drop, from Esso Standard Oil Co.

L. I. Conrad Discusses New Lanolin Concepts

Newer concepts of lanolin composition were brought into view by guest speaker Lester I. Conrad at

Lester I. Conrad

the March 9 meeting of the Chicago chapter of the S.C.C.

Mr. Conrad, technical director of the American Cholesterol Products, Inc., Milltown, N.J., has several patents to his credit on the processing of sterol products and lanolin.

Fragrance Foundations Sponsors Chicago Retailers' Seminars

Perfume and fragrance seminars will be conducted by The Fragrance Foundation in Chicago, Ill., with evening sessions April 5 through 8 and afternoon sessions on Tuesday and Wednesday of that week, in the Boulevard Room of the Sheraton Hotel.

Retailers have been invited to send their selling and buying personnel, as well as personnel from the display, advertising, fashion, promotion and training departments. At each session, an expert from the essential oil field will speak on perfume and how it is made, and the executive director of the Foundation, Mrs. Miriam Gibson French, will give pointers on how to sell fragrance products.

A box with ten coded purse-size bottles of different well-known perfumes will be given to everyone attending; those who send the highest number of correct identifications to the Foundation office within a month after the seminar will be awarded a "Certificate of Merit."

Colgate Wins F.T. Injunction Against Californian Retailer

Colgate-Palmolive Co. has won a permanent injunction prohibiting fair trade price violations on Colgate toiletries by the Pringle Drug Co., a Santa Ana, Cal., retailer.

Rhodia Starts Production at New Aromatic Chemicals Plant

Rhodia, Inc., New York, has started operations at its new aromatic chemicals plant in Paterson, N.J.

Shulton Reorganizes Atlantic Region Sales Force

Shulton, Inc. announces that with the recently announced promotion of Richard N. Parks from Atlantic branch manager to sales manager the Atlantic states territory will be divided into three other territories under Paul Stoneman, southern branch manager, William Guindon, Midwest branch manager, and James Murphy, Eastern branch manager. The Pacific territory will remain as previously under Northon Breiseth, manager.

Richard N. Parks

Among Our Friends

DR. EMIL G. KLARMANN's portrait occupied the cover of a recent issue of *Chemical and Engineering News*. The photograph was captioned: Emil G. Klarmann—Chemistry Bridges Cosmetics and Germicides.

SUZANNE DANCO, Belgian soprano, sister of GERARD DANCO, New York essential oil dealer, and LEON DANCO, perfume division of McKesson & Robbins, is on an American tour; she presented a recital in New York last month.

LOUIS E. McILVAIN, founder and for 30 years an official of the Associated Master Barbers and Beauticians of America, was honored by a resolution adopted by the board of directors of N.B.B.M.A. at a recent meeting.

VASANJI MANEK, son of RUGNATH MANEK, of Manek Chemical Co., Malad, India, and

Vasanji Manek

URMILA TANNA were married last month. Manek Chemical Co. represents Th. Muhlethaler Co. Ltd. of Nyon, Switzerland.

MRS. BEVERLY STIANSEN, vice-president in charge of sales for Mary Chess, is about to return from a cross-country trip, during which she worked with Midwest representative MAE ENRIGHT and West Coast representative LILLIAN TAYLOR.

Synthesized Floral Absolutes

Superlative Perfume Essentials

Resinoids

Supreme Perfume Oils

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The most useful Reference work on Solvents available today!

THE HANDBOOK OF SOLVENTS

By Leopold Scheflan, Ph.D. and Morris Jacobs, Ph.D.

727 pp., 7 x 10, 17 illus., $10.25

The properties, uses, action and technology of solvents are covered in this comprehensive handbook. Two major sections: 1. Covers theoretical aspects and practical attributes of solvents such as solvent action, solvent power, evaporation and evaporation rates and limits of inflammability. Discusses in detail solvent recovery, stresses safe practices; 2. The physical constants of over 2,700 liquid compounds are tabulated. Arrangement such that you can compare, at a glance, the so-called literature constants with the commercial constants of each solvent. $10.25 postpaid.

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PERCY C. MAGNUS, president, Magnus, Mabee & Reynard, Inc. was appointed by governor Thomas E. Dewey to represent New York State at the three-day White House Conference on Highway Safety held in Washington, D.C. last month.

GEORGE C. HOLLOWAY has been appointed manager of the military sales division of Colgate-Palmolive Co.

SAMUEL L. FREY has been appointed media director of Colgate-Palmolive Co.

MARY L. BROWN, who has been with Harriet Hubbard Ayer for six years as publicity manager,

Mary L. Brown

has been appointed brand advertising assistant on Surf, Lifebuoy, Breeze, Swan Toilet Soap, Silver Dust and Swan Floating Soap at the Lever Div. of Lever Brothers Co., which recently sold its Harriet Hubbard Ayer division.

ARTHUR G. LINDE has joined the sales staff of Givaudan Flavors.

ARTURO J. RODRIGUEZ, Roure-Dupont, Inc. has returned to New York from a five months business trip through Colombia, Venezuela, Peru and Ecuador and some of the leading cities of other Latin American republics. The trip was made by airplane.

ROBERT HORTON will cover New Jersey for Lady Esther, in addition to New York City, Long Island and Westchester. VINCENT PERRY will add New York State, exclusive of New York City, Long Island and Westchester, to his present territory of New England. JOSEPH O'KEEFE will cover Ohio, West Virginia and western Pennsylvania. C. EDWARD WARREN, JR. will add North Carolina to the territory he now represents. JOHN P. KAVAL will represent Lady Esther in Iowa and Nebraska in addition to his present territory of Wisconsin, Minnesota and northern Illinois. JAMES B. DADE will cover Kentucky and Tennessee as well as Missouri, Kansas and southern Illinois.

ROBERT WALLACE is the new sales manager for Bourjois.

WILLIAM HUNNEFIELD, ex New York Giant baseball star, has been elected president of Jean Nate Inc. Mrs. Hunnefield, (Jean Nate) who founded the business and has been president is now chairman of the board.

PHILIP CHALEYER, president of Ph. Chaleyer Inc., New York, N. Y. sailed on the United States February 18 for a five weeks business and pleasure trip to France. Most of his time will be spent in Paris and in southern France.

DULANY S. SMITH has been named to the newly creased position of director of new product development and market research at Alfred D. McKelvy Co.

VERNA GROVES has been appointed Tussy Cosmetiques traveling representative.

Fred M. Belcove

FRED M. BELCOVE has been appointed to Florasynth Labs.' Chicago sales organization.

KENNETH D. CALDWELL was honored at a surprise luncheon by officers and directors of Max Factor & Co. on the occasion of his 25th anniversary as advertising director of the firm.

EDWARD J. LIST has been appointed by Tussy Cosmetiques as junior sales representative, to assist ARTHUR ROBERTS in wholesale work in eastern and western Pennsylvania.

DR. ERICH BAER, professor in the Banting and Best Dept. of Medical Research, University of

Dr. Erich Baer

Toronto, Toronto, Ont., Canada, is the 1953 winner of the first award ($1,000) for outstanding research involving glycerine presented by the Glycerine Producers' Assn. Dr. Baer's achievement involved synthesizing derivatives of glycerol present in animal cells, but hard to isolate from natural sources.

CHARLES O. HOMAN, D&O vice-president in charge of sales, has retired from active service.

WALTER A. MILLER has been placed in charge of the newly formed Chemical group, and MICHAEL J. HICKEY will direct the operations department of the reorganized scientific staff of the Wm. J. Stange Co.

SAMUEL ESKENAZY has joined the Felton Chemical Co. He was graduated as a chemical engineer from the University of Lauzanne and has had broad experience in the perfumery and its allied industries.

James J. Driscoll

JAMES J. DRISCOLL has been elected a vice-president of the House of Tangee.

H. R. SHEPHERD, vice-president and director of research of the Connecticut Chemical Research Corp., Bridgeport, Conn., is the

H. R. Shepherd

new chairman of the Aerosol Division of the Chemical Specialties Mfrs. Assn., succeeding DR. E. G. YOUNG, of E. I. duPont de Nemours & Co. Elected at the recent CSMA annual meeting in Washington to head the division which represents the nation's aerosol and pressurized dispenser manufacturers, Mr. Shepherd was also chosen a member of the Board of Governors. Formerly assistant to the director of research at the Bridgeport Brass Company, Mr. Shepherd became associated with Connecticut Chemical Research five years ago.

J. LESLIE HINDLE, president of Standard Synthetics, Ltd., London, England, who is well known in the United States where he formerly operated an essential oil and aromatic chemical business, flew to the United States late in January for a three weeks' visit among old friends. His son Paul will enter Oxford University in the Autumn. He is a yachting enthusiast and an expert oarsman taking part in some of the chief rowing events on the Thames river. His daughter Prunella is associated with the British Broadcasting Co.

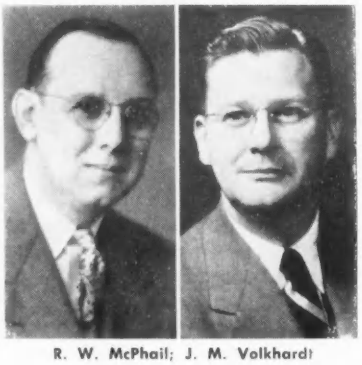
RENE LYON, president of Parfumes de Luxe Vigny, Paris, France was a recent visitor in New York. Prior to coming to New York he visited all agents of the company in Cuba, Mexico and in other Latin-American countries; and while here spent much of his time with the American distributors of the firm in the United States, A. M. Furman Co., 347 Fifth Ave., New York. Parfums Vigny was founded in 1917 by Rene, Henri and Andre Lyon. The latter was killed in the first World War. In 1922 the line was introduced into the United States where it did a substantial business until World War II. In addition to perfumes the company makes cosmetics including bath powder. All perfumes are packed in France and sent to this country in complete packages ready for resale.

STANLEY T. OLDS, Midwestern representative for Magnus, Mabee & Reynard, Inc., has been elevated to the presidency of the Allied Drug and Chemical Assn. of Mich.

JOHN WHITE has joined the D&O New Orleans sales staff, servicing New Mexico, Texas, Oklahoma, Arkansas, Mississippi, and Louisiana; FRANK BALL has joined the D&O Chicago branch office.

Left, John White; right, Frank Ball

JOHN M. VOLKHARDT, merchandising manager, has been promoted to director of sales by



R. W. McPhail; J. M. Volkhardt

Northam Warren Corp. ROBERT W. McPHAIL has been appointed divisional sales manager in charge of the wholesale drug and drug division.

F. G. MERCKEL has been elected president of Wallace & Tiernan Inc., R. M. JACKSON, executive vice-president, and G. D. PEET vice-president in charge of product engineering and development following the merger of Wallace & Tiernan Co. Inc. and Novadel-Agene Corp. to form Wallace & Tiernan Inc.

Obituary

Frank Steed

Frank Steed, administrator of the southern sales territory for Shulton, Inc. for the last 18 years, passed away recently at his home in Macon, Ga., after an illness of several months. He is survived by his wife, Mrs. Blanche Steed.

Victor Vivaudou

Victor Vivaudou, who had a rapid rise in the finished goods cosmetic business during the twenties died at his home in Glen Cove, N. Y., February 17 at the age of 73 years.

Mr. Vivaudou was born in Cannes, France, and came to the United States in 1914. He founded V. Vivaudou Inc. whose leading product was Mavis talc. The company thrived and two manufacturing plants in the United States and one each in Cuba, Canada and France were established.

With great prosperity in his hands he took a lively interest in horse racing and maintained the Riviera stables, entering his thoroughbreds in high stakes competitions here and in France. One of his horses won the Tia Juana handicap. When the recession came in 1921 he lost control of his big company which was subsequently taken over by David Schulte, the cigar store magnate. The company was one of the numerous cosmetic companies purchased by Mr. Schulte, all of which had a precarious existence. When Mr. Schulte withdrew from the Vadsco Sales Co. the various cosmetic concerns: Melba Mfg. Co., Djer Kiss, V. Vivaudou, Dellctrez American Druggists Syndicate and others were continued and in the past decade they were sold to various other companies.

After losing control of his big company Mr. Vivaudou began business under his own name but was restrained from its use on products similar to those offered by V. Vivaudou Inc. He then established Victor Industries which had a brief existence. Later he secured a position with Shulton Inc. and retired a year or so ago. He is survived by his widow and son Jean.

SHEFFIELD TUBES

first choice of the famous J. R. WATKINS CO.

Man's war on insect pests is virtually eternal... but it's adios to mosquitoes and jiggers to chiggers when Watkins' effective insect-repellent takes over! *Sheffield Process* collapsible tubes have been Watkins' choice for plus packaging of this item as well as Watkins' Lather and Brushless Shaving Creams, and Watkins' Toothpaste. Sheffield's association with this famous American company began before the turn of the century and has extended through wars, depressions, and good times alike. It suggests the wisdom of procuring collapsible tubes from Sheffield, where service is not merely a slogan but is based on expert counsel, quick action, and detailed follow-through. For superior tubes and tube-manufacturing know-how from A to Z, try Sheffield Tube on *your* next order.

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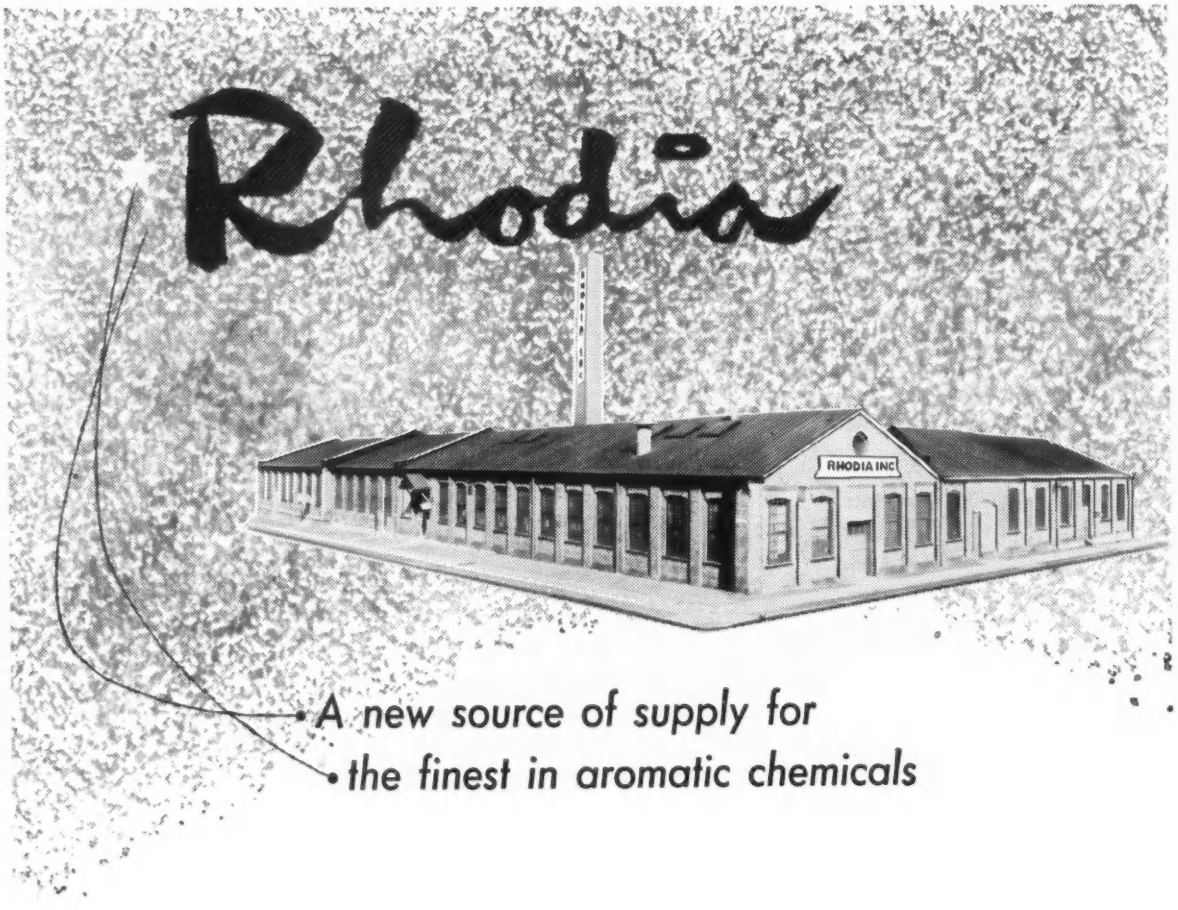

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MARCH

Sampler

NEW DUAL-USE COUPON
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1. ***Requesting Information or Literature***
2. ***Ordering Samples***

The handy coupon on the third page of the Sampler Section is divided in two sections. As you will see, one section is to be used *only* when further information and literature is wanted. The other section is for *ordering* Samples.

Technical Abstracts

The digestibility of stearyl alcohol, isopropyl citrates, and stearyl citrates and the effect of these materials on the rate and degree of absorption of margarine fat. C. E. Calbert, S. M. Greenberg, G. Kryder and H. J. Deuel, Jr. (Univ. So. Calif., Los Angeles). Food Res. 16, 294 (1951). None of these additives were found to interfere with the digestibility of margarine in the rat or dog even when fed at a level 25 times the maximum proposed.

Practical application of physiological antioxidants. K. C. K. Hickman, Conf. on Biol. Antioxidants, Trans. 4, 114-23 (1949). It should be possible, with natural or artificial antioxidants, to control spontaneous oxidation at various stages of the *in transitu* journey of metabolites. An oxidative or reductive status of the gastro-intestinal tract must be recognized, rather than the mere presence or absence of antioxidants. Because of its sparing action on many organs, the physiological antioxidant has little specificity and no recognized deficiency syndrome. Clinical laboratory criteria for antioxidant status should be devised, and an appraisal made of health and disease in relation to physiological antioxidants. (*Chem. Abs. 45*, 6251). Through J.A.O.C.S.

Decolorizing and sterilizing natural spices. Bernard T. Malter (½ to Oscar Solenger). U.S. 2,615,813, Oct. 28, 1952. The objectionable black, green, or red coloration is removed from pepper, nutmeg, cloves, and the like and they are sterilized without impairing the desirable characteristics of aroma, flavor, and "bite." The fibrous material in the natural spices is sepd. from the natural resins and oils in the spices. This fibrous material is then subjected to the action of an oxidizing agent to bleach the black, green, and red pigments. The natural resins and oils are then combined again with the bleached fiber. The resultant cream-colored or light-brown-colored spice is essentially the same as the original natural spice. *C.A., 47*, 3, 1308, 1953.

A study of the relationship of viscosity to free menthol content of Oregon and Washington peppermint oils. By Louis Fischer, Raymond J. Kahl and Nathan A. Hall. Peppermint oils from two Pacific Northwest growing areas were studied as to the relationship between free menthol content and viscosity. Correlation was found in oils from the same area but could not be carried over to oils produced in a different area. An existing method for use in determining free menthol was modified to be useful for peppermint oils from this region, even though the oil samples are not taken in the field at the time the oil is distilled. Viscosity changes in refrigerated oil samples were noted. *J.A.P.A., 42*, 1, 33, 1953.

Essential oils of the Belgian Congo. Anon. Intern. Perfumer 2, No. 5, 3-12 (1952).—The yields, distn., compn., and phys. and chem. properties of vetiver and rose geranium oils are discussed and tabulated. The production of citrus oils is discussed. *C.A., 47*, 1, 274, 1953.

Tooth paste. Jacques E. Brandenberger and Francois J. Bossard. Ger. 805,416, May 17, 1951 (Cl. 30h,13_{10}). The product is an oil emulsion contg. an abrasive, in which the aq. phase of the

507—ASTROTONE, RHODIA

A Macro-cylic compound chemically similar to the MUSK-LIKE material of natural origin. A remarkable fixative for delicate fragrances and flavors. The addition of .5% of ASTROTONE imparts a distinct improvement in flavor and odor LIFE of your compounds.

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A Warm, heady, very rich odor. A remarkable additive whenever you are seeking a leather note.

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510—FORSYTHIA VERLEY

The refreshing Forsythia note is now available for your entire cosmetic and fragrance line. Following 'Forsythia Verley', we have developed:

Forsythia for Brilliantine @ $10.00 lb.
Forsythia for Soap @ $ 6.00 lb.
Forsythia water-soluble @ $ 4.00 lb.
Forsythia for Aerosol @ $ 9.00 lb.

ALBERT VERLEY & COMPANY, INC.
114 East 25th St. New York 10, N. Y.

emulsion is a satd. NaCl soln. Dyes, antiseptics, etc., may be added. *C.A.*, *46*, 17, 8336, 1952.

Antiseptics for Food. Sogo Tetsumoto (to Reasearch Institute Infectious Diseases). Japan. 176, 102, Apr. 22, 1948. Hendecylenic acid (I) or I and EtOH, or esters of higher alcs. contg. 7-11 C atoms with I or capric acid is used. *Chem. Abs.*, 1951, *45*, 4851.

Lyophile ointment base. Takao Kariyone (to Kao Soap Co., Inc.). Japan. 689 ('51), Feb. 16 $(CH_2)_2O$ and stearyl alc. (15:1 in mol. ratio) are copolymerized and condensed, 5 g. of which is mixed with 25 g. fat or stearyl alc., 5 g. $C_3H_5(OH)_3$, and 65 g. water by heating at 70-80°. *C.A.*, *46*, 22, 11593, 1952.

Aggregation of oil particles in emulsions. E. G. Cockbain (Brit. Rubber Producers' Research Assoc., Welwyn Garden City, England). Trans. Faraday Soc. 48, 185-96 (1952).—The reversible aggregation and disaggregation in soap-stabilized emulsions of C_6H_6 or paraffin hydrocarbons was studied as detd. by the rate of creaming. Aggregation of the oil particles commenced at a soap concn. the critical micellar concn. Max. and min. aggregation were most pronounced with C_6H_6 as the disperse phase and soaps with unbranched hydrocarbon chains as stabilizers. The results are explained on the basis of multimol, adsorption, which is considered to occur at soap concns. greater than the critical micellar value. Addn. of inorg. salts prevented disaggregation of the emulsion particles and reduced the soap concn. at which aggregation commenced. The latter process was independent of the salt anion when an anionic soap was used as stabilizer. *C.A.*, *46*, 17, 8396, 1952.

Water-soluble derivative of chlorophyll. Toshihisa Ito and Tatsuko Inoue (to Shiseido Co.). Japan. 538 ('51), Feb. 13. Chlorophyll mixed with dil. alc. contg. Na_2CO_3 is heated to boiling, and allowed to stand for a long time, insol. substances are removed, the alc. in the soln. is removed, and the residue is dissolved in abs. alc. and poured into Me_2CO to ppt. a water-sol. chlorophyll deriv. *C.A.*, *46*, 22, 11595, 1952.

Extraction of oil-soluble chlorophyll derivatives. Masao Takahashi. Japan 540 ('51), Feb. 13. Boiled or frozen green leaves are dried, powdered, and immersed in one or more of lanolin, turtle oil, olive oil, and tsubaki seed oil, which contains abs. alc. or dry Me_2CO or both and an org. acid. After 30 min. at room temp., the mixt. is filtered, the alc. or Me_2CO removed from the filtrate, the residue treated with an alc. soln. of acetate or sulfate of Cu, Fe, or Zn, boiled for 5 min., shaken with warm alk. water to remove salts and remaining solvent, and filtered through a $MgCO_3$ layer. *C.A.*, *46*, 22, 11595, 1952.

Development of aromatic industry in Japan. Teikichi Hirajima. Koryo (Aromatics) No. 21, 8-12 (1952).—A historical survey of the growth of industry since its beginning 60 years ago. *C.A.*, *47*, 3, 1339, 1340, 1953.

Extraction of chlorophyll. Tsuyoshi Hidaka, et al. (to Nissan Chemical Industries Co.). Japan. 539 ('51), Feb. 13. Dried green leaves are extd. with liquid NH_3, the NH_3 is removed, and the residue is extd. with known org. solvents. *C.A.*, *46*, 22, 11595, 1952.

Treatment of crude camphor oil. Masao Ono. Japan. 508 ('51), Feb. 13. Crude camphor oil is treated with an equimol. amt. of phenols from coal tar and fractionally distd. The fractionation depends on the formation of mol. compds. of camphor and phenols; the phenols are sepd. by washing with alkali. *C.A.*, *46*, 22, 11595, 1952.

Brazilian cabreuvas and their essential oils. Y.-R. Naves (*Perfum. essent. Oil Rec.*, 1952, *43*, 357, 393).—Nerolidol, the sesquiterpene analogue of linalol hitherto very expensive, is now being produced more cheaply from certain essential oils from wood of the cabreuvas family. K. Foulkes. Through *Brit. Chem. Abs.*

Essential oil from Ocimum Killimanjaricum, Guerke. Isolation of 70% of camphor. U. G. Nayak and P. C. Guha (*J. Indian chem. Soc.*, 1952,

511—HYDRO GARDENIA

A very fine Gardenia odor, extremely powerful, at a low price.

Price per lb. $4.00

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512—MUSK TONQUIN CHAMOMILE OIL ENGLISH CIVET NATURAL

and hundreds of other basic materials for perfumers are listed, for immediate shipment, in the new MM&R "King-Size" Catalogue.

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513—SAFRENE 1954

A new aromatic of a sassafras type with added top perfume note. Wide application for general deodorizing work and for perfuming soap products. Of particular interest in current market with advancing prices for artificial sassafras.

Price per pound $ .42
Price per drum .37

DODGE & OLCOTT, INC.

180 Varick Street New York 14, N. Y.

514—SPICINE
New Floral Spice Odor

A fine floral spice odor for men's and women's lines. Very popular in colognes, after-shave lotions and talcum. Also makes fast sellers out of toilet water, face powder, sachet, bath oil and liquid shampoos.

2 oz. sample $1.50 1 lb. $10.00

AROMATIC PRODUCTS, INCORPORATED

15 East 30th Street New York 16, N. Y.

✶ MARCH

Sampler

29, 112-116).—Steam distillation of the above plant, grown in India from African seeds, gives an essential oil (3.3%) which consists chiefly of D-α-pinene (10%), D-limonene (6%), terpinolene (5%), and D-camphor (70%). Drying the leaves or fermentation of fresh leaves increases the yield of oil. The oil on freezing yields D-camphor, and a liquid which on fractionation gives: D-α-pinene, b.p. 155-156°/685 mm., $[a]^{s}D^{5}$+62.6°, which is converted into *iso*bornyl chloride, m.p. 150°, and bromide, m.p. 133°, and is oxidised to pinonic acid, m.p. 68°; D-limonene, b.p. 172-173°/685 mm., $[a]^{s}D^{5}$ +71.2°, which is converted into dipentene dihydrochloride (I), m.p. 50°, and dihydrobromide, m.p. 64°; terpinolene, b.p. 68-69°/11 mm. $[a]^{s}D^{5}$+6.2°, which is converted into I; camphor; and higher-boiling fractions. R. J. Bridgwater. Through ***Brit. Chem. Abs.***

Camphor: natural and "synthetic." II. W. M. Coates (*Perfum. essnt. Oil Rec.*, 1952, *43*, 360-363, 395).—The commercial production of "synthetic" camphor is described. K. Foulkes. Through *Brit. Chem. Abs.*

Chewing-Gum Compositions. Walter M. Bruner (to E. I. duPont de Nemours & Co.). U. S. Pat. Appl. 94,753, Official Gaz. 642, 333 (1951). From 0.5 to 10% of urea (carbamide), thoroughly milled into conventional chewing-gum compdns., functions as a bacteriostatic agent against Lactobacillus acidophilus, believed to promote tooth decay. The urea does not detract from the taste and chewing characteristics of the gum and is available over a longer peroid of time than when used in tooth powder. To 15 g. of chewing gum contg. 28% base (e.g. chicle, spruce gum, worked rubber, etc.) and 72% sugar, flavoring sirup, and softener is added 0.75 g. urea, so that the final compn. contains 4.8% urea. After 60 min. chewing time 0.15% urea still remained in the gum. Chem. Abs. *46*, 7, 3225.

515—SULFOMIN
(elementary Sulfur)

Sulfur in liquid form, completely soluble in water, alcohol, oils, etc. Highly recommended for all hair preparations, ointments, salves, etc. Excellent for arthritis; increases basic metabolism, also very effective resorptive properties.

Price $.60 per oz.
MANUFACTURERS CHEMICAL CORP.
New York 12, New York

AMERICAN PERFUMER 48 West 38th Street, New York 18, N. Y.

1. MARCH SAMPLER

INFORMATION REQUEST FORM

Please have further information and literature sent on items as circled below.

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508	511	514
509	512	515

2. MARCH SAMPLER

ORDER FORM

Please have samples with invoices to cover sent on items as circled below.

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508	511	514
509	512	515

Please attach coupon to your company's letter head or comparable identification.

NAME .....

FIRM NAME .....

ADDRESS .....

CITY ..... ZONE ..... STATE .....

Vogue Beauty Editor Gives British S.C.C. Ad Hints

Tips on cosmetic advertising by Mrs. Evelyn Forbes, beauty editor of *Vogue*, were presented at the recent opening lecture of the Winter session of the Society of Cosmetic Chemists of Great Britain.

Urging the employment of more women in such advertising, she pointed out that they better understood the needs of other women. Sincerity and genuine desire to help the user, she felt, were prime requisites. Approaches she depreciated included statistics, block diagrams, graphs, humour and masses of copy. "Leave some white space", she pleaded. As to the essay or editorial type ad, she thought them to be effective, as most women magazine readers read the editorials, she said.

She considered it unwise to try and "blind women with science"; she held the "magic" angle to be far more effective. She said women were quite prepared to believe in the "magic" effect of a cosmetic, not so much in the form of secret ingredients from Cleopatra's tomb, but the fact that one particular product could do marvellous things for her. It is important, she said, that it must be the picture of her dream-self, not the everyday working self.

She considered the use of the beautiful female face on advertisements effective as recalling a woman's "dream-self." A really good photograph, she said, would be more satisfactory for advertisement purposes than a drawing, but perfect photographs would not be so easy to obtain and a drawing would allow freer scope for the imagination.

She also stressed the importance of a clever, imaginative product name for selling. She regarded it as a mistake to attach the names of famous women to a cosmetic product, since the woman would grow older and date the product. House names, on the other hand, used in the form of a surname, she held, might be very useful and become household names.

As to the use of colour names, she regarded it unwise to give a name such as "hyacinth"; "hyacinth pink" she considered much better.

On the question of instructions, Mrs. Forbes said that few women read them, and very often were dissatisfied with a product simply because they had ignored them and used the product wrongly. Where instructions are considered necessary, she stated, they should be short and to the point.

She emphasized that advertisements will only sell the first sample, but that the product itself must be relied upon for the repeat sales.

In regard to choice of advertising medium, she claimed magazines were usually read from cover to cover during moments of relaxation, while newspapers were usually given a cursory look-over during breakfast, then probably not looked at again during the day. Consequently, she held, advertisements in magazines stood a much greater chance of being favorably received. She also felt quite certain that women trust the advertisements they read, particularly if in a reputable publication. A reputable magazine, she claimed, does make an effort to test a questionable advertisement, even if only amongst its staff, and no questionable advertisements were usually accepted, she stated.

U. N. Korean Representative Speaks at Big Drug Trade Dinner

The address of Hon. Ben C. Limb, representative of Korea to the United Nations was the feature of the annual banquet of the Drug, Chemical and Allied Trades Section of the New York Board of Trade in the Waldorf Astoria, New York, March 4.

As usual a record crowd of over 2,300 attended the meeting. Numerous companies invited guests to their rooms for informal receptions before and after the dinner.

Dr. Joseph Schultz on Board of Directors of Zonite Products

Dr. Joseph Schultz, president of the Lady Esther Cosmetic Co., has been elected to the board of directors of the Zonite Products Corp., it has been announced by Colby M. Chester, chairman of the board. Lady Esther recently was acquired by Zonite as a wholly-owned division.

All direct sales of Lady Esther cosmetics to retail druggists will be handled by the sales department of Zonite Products Corp.

Fragrance Foundation Convention Features Consumer Panel

The fifth annual convention of The Fragrance Foundation, featuring a Panel of Consumers, will be held March 11, starting at 11:00 A.M., at the Plaza Hotel, New York.

Fragrance Foundation's Counter Points Has New Format

The Fragrance Foundation's Counter Points, an educational bulletin sent to retailers all over the country for use by salesgirls, is now being issued in a new format, to fit salesbooks for ready reference. Four issues per year will be distributed: Mid-Winter, Spring, Summer and Fall.

For the Highest Standard
in All Aromatics
Our services encompass not only the supply of perfume and flavor materials but also authoritative counsel for their effective application in perfume, soaps, cosmetics and allied uses. We invite your inquiry.
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Market Report

Sharp Increase in Demand

DEMAND for essential oils, aromatic chemicals and closely related items ran into considerable volume in the first month of the new year with major suppliers predicting an increase in February volume over January despite the shorter month. The buying movement was in some measure stimulated by an upward trend in the prices of many articles. The upward curve in the market was in sharp contrast to the easier trend for many items during the greater part of last year. Crop conditions were in some measure partly responsible for the hardening price trend since the start of the year although consumer stocks in many instances had reached such a low point that replacement purchases proved necessary.

Oils Swing Upwards

All varieties of citronella oil moved higher, and lemongrass, clove leaf oil and petitgrain all registered advances. The prices for petitgrain rose steadily on reports of a better inquiry in Paraguay for the account of some large buyers on the continent. For a time rumors were current to the effect that exports had been prohibited out of the primary center, but all attempts to obtain official confirmation of such reports were unsuccessful.

The strength in clove leaf oil was traced to recent heavy purchases for Holland, Great Britain and other European countries which materially reduced stocks in France. Supplies in Madagascar also declined under the influence of good sales for the United States and the continent.

Fully realizing the unsettled political conditions in Central America, exporters of lemongrass in India lost no time in boosting their export prices for the oil with the result that local prices responded to higher levels. While good quantities of lemongrass oil go into the manufacture of aromatic chemicals, the oil likewise enjoys a good demand here for use in the manufacture of synthetic vitamin A.

Prices for cardamon oil soared to new high levels and cocoa butter hit another new high for a brief period as the result of the continued strength in cocoa beans. Other items scoring advances included stearic acid, red oil, and patchouli.

Refined Glycerin Drops

While crude glycerin prices edged up several cents a pound, major producers announced a rather sharp decline in refined material. The drop, amounting to 4 cents a pound, was attributed to a reduced consumption especially in the alkyd resin field for surface coatings on automobiles, refrigerators and many other items. The reduction marked the first change in refined glycerin since September at which time prices were slashed 6 cents a pound. The surface coating of alkyd resin field is one of the largest single outlets for glycerin, thus a drop in this field served to have a decided influence upon the general tone of the market. Unlike that of a year ago, however, very little crude material has been imported into this market, and prices of crude soap lye were firm.

The position in several industrial chemicals is not particularly favorable. Chlorine has continued to be in a long supply position. Prices for acetic acid have been subject to shading and a rather unsettled tone has developed in mineral acids, namely muriatic and sulphuric. Indications are that industrial chemical makers will encounter keener competitive conditions in the future as greater selling pressure develops.

Mint oils displayed a rather unsettled tone for a short period, especially spearmint. After declining 5 cents a pound, spearmint developed a steadier tone with most dealers being inclined to be rather bullish regarding the longer term outlook in the market. It will be many months before distillation of another crop gets underway, and consumption of both spearmint and peppermint should gradually increase as the new year gets underway. The unsettled tone in the market in January and early February was attributed to a keener desire on the part of some dealers in the country to move excess lots that had been allowed to accumulate late last year. The outlook in peppermint continues to be regarded as extremely firm. More and more high test oil will be required for blending in the months ahead.

Brazilian Menthol Down

A late dip in Brazilian menthol came as a surprise to many in the trade, especially since prices from Japan have been steadily working higher, and makers of synthetic material continue to be faced with mounting costs of citronella oil, basic material from which synthetic laevo menthol is made. However, there is considerable speculation in trade circles as to the quantity of menthol available in China which is continuing to sell at lower prices on the continent. Menthol of Chinese origin has been selling in Europe at as low as $4 per pound in contrast to duty paid prices in this market ranging from $4.90 to $11 a pound.

While no imports of Chinese menthol have been permitted in this market, nevertheless, the competitive situation abroad is expected to be an influential factor here, especially in the face of a continued sluggish demand. According to reports Canada has been buying low-cost Chinese menthol. The period is gradually approaching when new production of menthol should get underway in Brazil but comparatively few detailed reports have been received concerning the size of the coming crop of mint, from which natural menthol is produced.

PRICES IN THE NEW YORK MARKET

ESSENTIAL OILS

Prices per lb. unless otherwise listed.

Almond Bit, FPA per lb.	3.40@	3.80
Sweet True	.55@	.90
Apricot Kernel	.48@	.55
Amyris	1.50@	1.75
Angelica Root	70.00@	110.00
Angelica Seed	58.00@	90.00
Anise, U.S.P.	2.80@	Nom'l
Bay	1.50@	2.10
Bergamot	11.60@	14.00
Artificial	3.00@	4.75
Birchtar, crude	1.80@	2.10
Birchtar, rectified	2.55@	2.85
Bois de Rose	4.00@	4.50
Cajeput U.S.P.	2.45@	3.15
Cajeput (technical)	2.00@	2.25
Calamus	15.00@	20.00
Camphor "White"	.35@	.55
Cananga, native	9.00@	10.15
Rectified	12.60@	13.75
Caraway	2.75@	3.00
Cardamon	40.00@	55.00
Cascarilla	35.00@	40.00
Cassia, rectified, U.S.P.	8.00@	Nom'l
Cedar leaf, U.S.P.	2.25@	3.00
Cedar Wood	.55@	.60
Celery	16.00@	20.00
Chamomile Hungarian	180.00@	275.00
Cinnamon—		
Bark	25.75@	50.00
Leaf	1.35@	3.00
Citronella, Ceylon	.68@	.90
Java	.80@	1.00
Java type	.80@	.90
Cloves, from buds	4.85@	7.00
Leaf	1.55@	2.00
Copaiba	2.00@	2.65
Coriander	17.00@	22.50
Croton	4.35@	5.00
Cumin	4.50@	5.00
Dill—		
Weed	3.80@	4.65
Seed, Indian	2.90@	3.40
Erigeron	5.50@	6.85
Eucalyptus—		
80-85%	.90@	1.10
70-75%	.65@	.95
Fennel, Sweet	2.50@	3.25
Garlic (oz.)	8.75@	10.50
Grapefruit	3.15@	3.70
Geranium, Rose Algerian	9.50@	11.75
Bourbon	11.00@	12.50
Turkish	6.00@	6.90
Ginger	10.30@	13.00
Guaiac (Wood)	1.35@	1.75
Hemlock	2.25@	2.85
Jasmin (absolute)	235.00@	350.00
Juniper Berry	2.65@	3.25
Laurel leaf	9.85@	12.60
Lavandin	2.15@	3.00
Lavender, French—		
40-42% ester	6.25@	7.35
30-32% ester	3.00@	4.50
Spike	1.55@	2.00
Lemon, Calif.	7.25@	7.50
Italian	7.25@	10.25
Lemongrass	1.60@	1.85
Limes, distilled	5.75@	7.25
Expressed	7.75@	9.50
Linaloe wood	3.25@	4.00
Lovage (oz.)	10.00@	12.00
Mace	2.50@	3.60
Marjoram	2.00@	2.50
Neroli—		
Haitian	75.00@	100.00
French	200.00@	250.00
Nutmeg—		
East Indian	2.90@	3.50
West Indian	2.65@	3.65
Ocotea Cymbarum	.70@	1.10
Olibanum	5.60@	7.85
Opopanax	35.00@	40.00
Orange, Florida	.65@	.85
Italian	3.90@	6.00
Calif., exp.	.85@	1.25
Distilled	.80@	—
Origanum	2.00@	2.75
Orris Root, concrete (oz.)	6.50@	8.75
Concrete, extra	12.00@	15.00
Patchouli	7.65@	9.75
Pennyroyal, European	1.75@	2.40
Peppermint natural	5.65@	6.00
Redistilled	6.10@	6.65
Petitgrain	2.90@	3.25
Pimento, Berry	4.50@	5.25
Leaf	2.45@	3.00
Pinus Sylvestris	2.85@	3.50
Pumilio	3.60@	4.80
Rose, Bulgaria (oz.)	60.00@	80.00
Synthetic, lb.	30.00@	35.00
Rosemary, Spanish	.65@	.95
Sage—		
Spanish	.90@	1.25
Dalmation	7.00@	8.15
Sandalwood, N. F.	9.50@	10.25
Sassafras—		
Artificial	.65@	.90
Snake root	30.00@	32.50
Spearmint	6.00@	6.55
Spruce	2.25@	2.75
Sweet birch Southern	2.10@	3.00
Northern	4.50@	8.00
Tansy	8.00@	8.90
Thyme, red	1.75@	2.50
White	2.00@	3.40
Valerian, extra	95.00@	120.00
Vetivert—		

are you searching for a scent?

You don't have to be a Sherlock
to find the right scent for
your soap, cream, toilet preparation,
cosmetic, etc.

Let the imagination and skill of Perry Brothers' master perfumers formulate the particular fragrance that will enhance your product and make it sell. Over 25 years of know-how and experience in the creative art of perfuming.

Let us send you samples best suited for your specific needs.

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6923 McAlpin Avenue Chicago 30, Ill. *Brookfield Connecticut* *4347 McPherson St. Louis 8, Mo.*

SELECTED BOOKLIST

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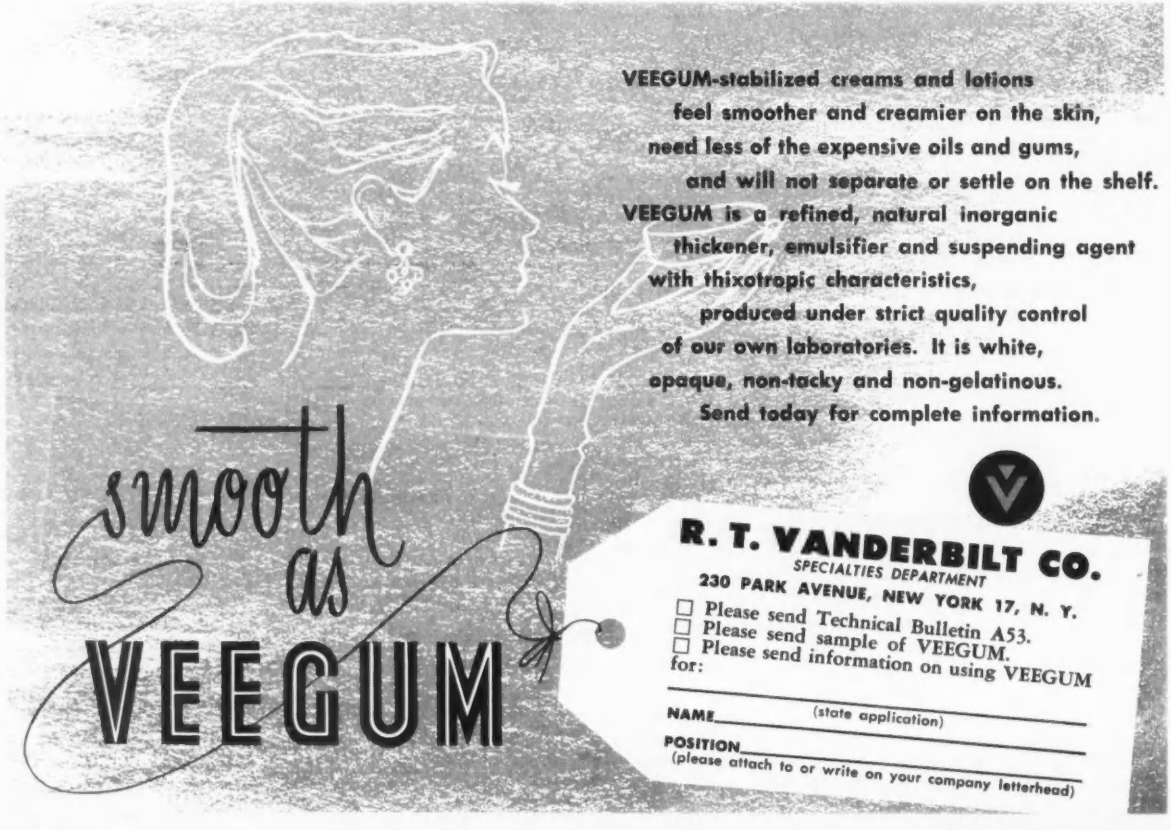

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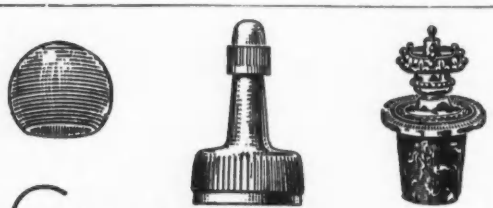

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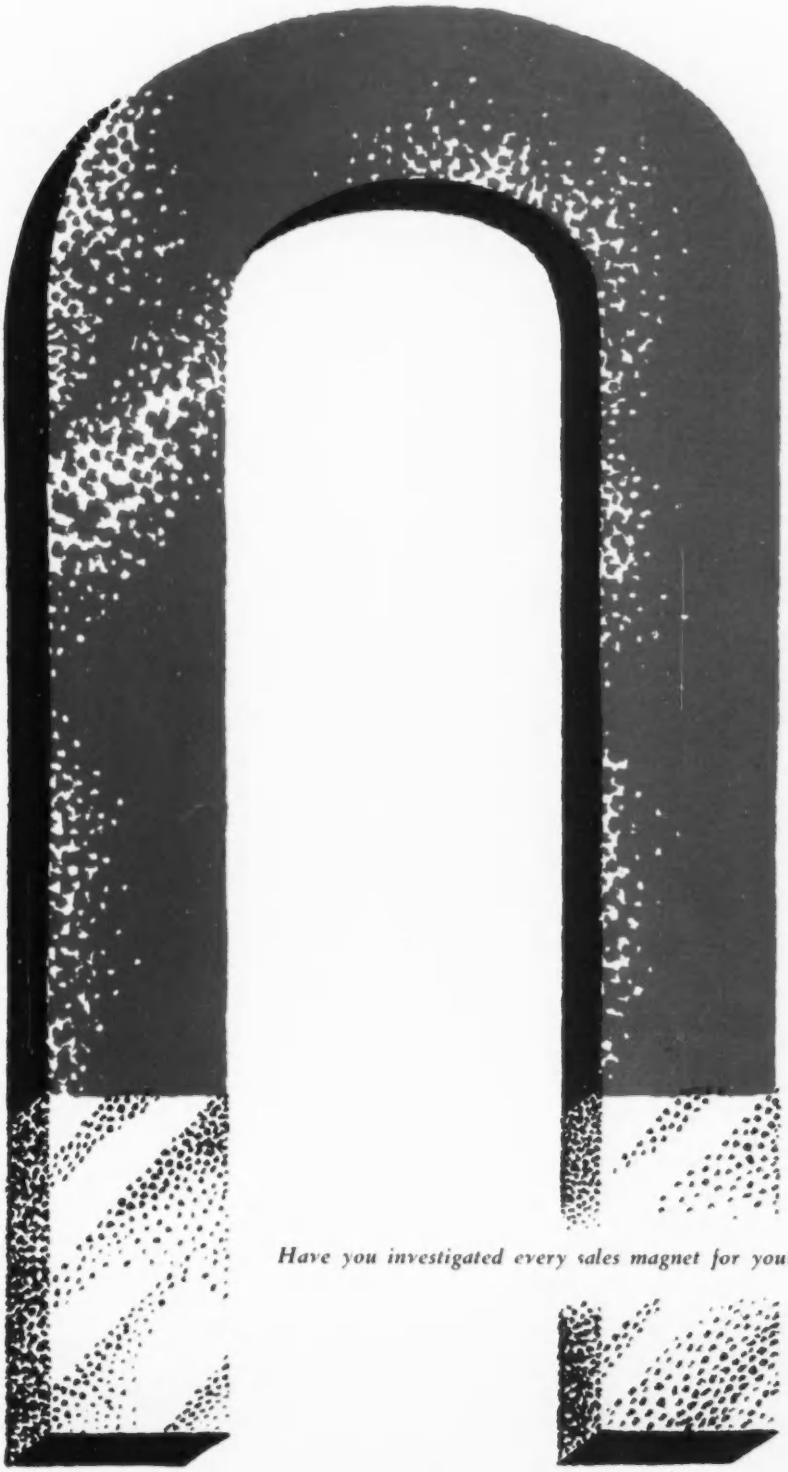

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